



CATALOG

2023-2024



List of Programs	4	Associate Degree & Technical Diploma Programs	9
Welcome	5	Certificate Programs	63
Academic Calendar	5	Apprenticeships	67
Accreditation	6	Continuing Education	73
Core Abilities.....	6	Agriculture Training	
Online Learning	7	Health Training	
Credit for Prior Learning	7	Business & Industry Services	
		Public Safety Training	
		Outreach Centers	
		Community Education & Services.....	75
		Course Descriptions.....	79

Southwest Tech Programs

Associate Degrees, Technical Diplomas, Certificates, and Apprenticeships

A	Accounting	9	H	Health Information Technology	38
	Accounting Assistant	10		Human Services Associate	39
	Agribusiness, Science, & Technology:		I	Individualized Technical Studies	40
	- Agribusiness Management	11		Industrial Electrician Apprenticeship	68
	- Agronomy	12		Industrial Mechanic	41
	- Agronomy Technician	13		Instrumentation and Controls Technology	42
	- Animal Science	14		IT-Cybersecurity & Network Administration	43
	- Applicator Technician Certificate	63		IT-Network Systems Technician	44
	Agricultural Power & Equipment Technician	15	L	Laboratory Science Technician	45
	Artisanal Modern Meat Butchery	16		Leadership Development	46
	Auto Collision Repair & Refinish Technician	17		Logistics	64
	Automotive Technician	18	M	Mechatronics Technician Apprenticeship	69
B	Building Performance Technician	19		Medical Assistant	47
	Building Trades–Carpentry	20		Medical Coding Specialist	48
	Business Management	21		Medical Laboratory Technician	49
C	Cancer Information Management	22		Midwife (Direct Entry)	50
	Cancer Information Management		N	Nonprofit Leadership	51
	Advanced Technical Certificate	63		Nursing Assistant	52
	Child Care Services	23		Nursing-Associate Degree	53
	CNC Machine Operator/Programmer	24	P	Payroll Assistant Certificate	64
	Construction Electrician Apprenticeship	67		Physical Therapist Assistant	54
	Cosmetology	25		Plumbing Apprenticeship	70
	Criminal Justice-Law Enforcement 2	26		Production Planner	65
	Criminal Justice-Law Enforcement 720 Academy ...	27		Purchasing Agent/Buyer	65
	Criminal Justice Studies	28	S	Solar Installation Technician	66
D	Dairy & Livestock Technician	29		Supply Chain Assistant	55
	Data Analytics	30		Supply Chain Management	56
	Dental Assistant	31		Surgical Technology	57
	Driver Safety Education Certificate	73		Sustainable Energy Management	58
E	Early Childhood Education	32	T	Tax Preparer Assistant	66
	Early Childhood Licensing Basic Ages 0–2	64		Technical Studies–Journeyworker	71
	Electrical Power Distribution	33	U	University Transfer-Associate of Arts	59
	Electro-Mechanical Technology	34		University Transfer-Associate of Science	60
	Emergency Medical Technician	35	W	Welding	61
G	Golf Course Management	36			
	Graphic & Web Design	37			

Welcome. We're Glad You Are Here!



Welcome to Southwest Tech! We are grateful you are a student at our college. You will notice that we are a friendly college and we strive to help every single student. As we get to know you, please ask us about our programs, services, and opportunities for students. You may also find answers to your questions at our web site www.swtc.edu.

We have found that students who attend and in class are most likely to be successful. The faculty strive to make the learning environment very similar to what you will find in the real world. In our classes, you will get individual attention and hands-on experience. The more you participate in class, the more you will enjoy learning as you prepare for a career. We also strive to help you learn and develop outside of the classroom.

In the Knox Learning Center you will find tutors, library services, computers, and more that will help you be successful. If you would like to meet other students, you may want to join a club or participate in an activity. Many students enjoy Charley's, which has all sorts of activities and games for students to relax and enjoy time together. You can also get assistance from Academic Success Coaches who are dedicated to helping students achieve their goals. Thank you for choosing Southwest Tech. We look forward to your success!

Jason S. Wood, Ph.D., College President

Mission Statement

Southwest Wisconsin Technical College provides education and training opportunities responsive to students, employers, and communities.

Vision Statement

Southwest Wisconsin Technical College will be a preferred provider of education, source of talent, and place of employment in the region. We at the College change lives by providing opportunities for success.

Please reference the Student Handbook for policies regarding financial aid, grading, and conduct.

www.swtc.edu/handbook

Southwest Tech reserves the right to modify Student Policies and Procedures and Employees' and Students' Right to Know at any time to reflect changes in district policy and/or applicable law.

2023–2024 Academic Calendar

JULY

12 Book Vouchers Begin

AUGUST

21 Fall Semester Begins for All Students
27 Drop/Add Period Ends

SEPTEMBER

1 Begin Accepting Applications for 2024-2025
4 Campus Closed (Holiday)
20 Fall Financial Aid Book Deferment Ends
28 1st Semester Disbursement of Grants and Federal Loans

OCTOBER

6 Program Completion Forms Due
13 No Classes
13 End of First Eight Weeks

NOVEMBER

13 Veteran Priority Registration
14 Continuing Student Registration Begins
27 New Student Registration Begins
23–24 Campus Closed (Holiday)

DECEMBER

1 Spring Semester Book Deferment Opens
6 Waitlist and Early Start Registration Begins
15 Winter Graduation Ceremony
18 Open Registration Begins
18 Grades/Course Assessments Due

WINTER BREAK

December 18–January 14: No Classes

December 25–January 1: Campus Closed

JANUARY

15 Spring Semester Begins
21 Drop/Add Period Ends

FEBRUARY

14 Spring Financial Aid Book Deferment Ends
16 Program Completion Forms Due
22 2nd Semester Disbursement of Grants and Federal Loans

MARCH

8 End of First Eight Weeks
11–15 Spring Break—No classes
18 Veteran Priority Registration
19 Continuing Student Registration Begins
28 No Classes
29 Campus Closed (Holiday)

APRIL

1 Campus Closed (Holiday)
8 New Student Registration Begins

MAY

6 Waitlist Registration Begins
18 Spring Graduation Ceremony
20 Grades/Course Assessments Due
27 Campus Closed (Holiday)

JUNE

3 Summer Semester Begins
10 Open Registration Begins



Accreditation

Southwest Wisconsin Technical College is accredited by the [Higher Learning Commission \(hlcommission.org\)](http://hlcommission.org), a regional accreditation agency recognized by the U.S. Department of Education. Southwest Tech has been accredited since 1976. In 2002, Southwest Tech was accepted as an AQIP institution, and in June, 2017 became a member of the Standard Pathway.

Higher Learning Commission
230 South LaSalle Street, Suite 7-500
Chicago, IL 60604
800.621.7400

Programs offered by the college are also approved by the Wisconsin Technical College System and the Educational Approval Board for the Veterans Administration.

Core Abilities

In cooperation with representatives from business and industry, Southwest Tech faculty and staff have identified six skills that are essential to a person's successful performance on-the-job. These six core abilities will be evaluated in all programs within the College.

Southwest Tech's core abilities provide graduates with life-long skills that will assist them in obtaining and keeping a job. Employers have said they prefer to hire and promote persons who exhibit the following characteristics:

Act Professionally. To act professionally means that an individual recognizes an obligation to conform to the technical and ethical standards of their chosen career.

Communicate Clearly. To communicate clearly means an individual is able to apply appropriate writing, speaking, and listening skills to precisely convey information, ideas, and opinions.

Value Learning. To value learning means an individual maintains acquired knowledge and skills, acquires new knowledge and skills quickly, and adapts to technological and workplace changes.

Work Productively. To work productively means an individual applies effective work habits and attitudes within a work setting.

Work Cooperatively. To work cooperatively means an individual is capable of working with others to complete tasks, solve problems, resolve conflicts, provide information and offer support.

Solve Problems. To solve problems means an individual is able to use all elements of problem solving strategies to generate realistic, practical, and workable solutions.

Online Learning

Online Learning at Southwest Tech offers you flexibility. Whether you are a working adult looking to obtain a degree, or a high school student needing to pick up a few college credits, online learning can work for you.

Online Associate Degree Programs

- Accounting
- Business Management
- Data Analytics
- Cancer Information Management (CIM)
- Early Childhood Education
- Health Information Technology (HIT)
- Leadership Development
- Nonprofit Leadership
- Supply Chain Management

Online Technical Diploma Programs

- Accounting Assistant
- Child Care Services
- Driver Safety Education
- Medical Coding Specialist
- Supply Chain Assistant

Online Certificates for Career Advancement

- Agribusiness Science & Technology-Applicator Technician
- Cancer Information Management Advanced Technical Certificate
- Logistics Certificate
- Payroll Assistant
- Production Planner
- Purchasing Agent/Buyer
- Solar Installation Technician
- Tax Preparer Assistant

Requirements for an Online Student

1. Chromebooks are not compatible with some testing features within Schoology (our Learning Management System.) Southwest Tech does not recommend Chromebooks for classes.
2. Cable/broadband/DSL internet with a minimum speed of 1.5Mbps. Test your local internet speed at www.speedtest.net. Higher bandwidth and speed will greatly assist you in your online learning environment, so where possible, a faster internet speed is recommended. Cable internet tend to be faster than DSL or 4G wireless, although DSL or 4G wireless may also work depending on other factors. Your computer, other software (such as anti spyware), other users on the system, and system configurations can all influence your ultimate line speed. Many instructors use videos as a part of their instruction, as well as synchronous meeting times (Skype, Adobe Connect, etc). Having an acceptable internet connection speed will be important to your success.
3. Convenient access to a computer that has one of the following current versions of Internet Browsers: Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, and Safari. Call 608.822.2302 for verification of other browsers.
4. An active e-mail account (all Southwest Tech students are issued a free email account)
5. Word processing software. Microsoft Word is the recommended software at Southwest Wisconsin Technical College. Free Microsoft Office software is available to all Southwest Tech students at <http://products.office.com/en-us/student>.
6. Availability of 10-15 hours per week for each 3-credit course
7. Self-motivation and self-discipline

Credit for Prior Learning

Credit for prior learning gives students at Southwest Tech the opportunity to earn credit for college-level learning that was acquired outside of the classroom. There are six different ways to earn credit. Not all options are available for all classes. Please check your program page to see what is accepted for your program.

Transfer Credits

Credits earned at another accredited institution may transfer if related to the program of study and have a grade of "C" or better. Transfer credits also include advanced standing and transcribed credits completed in high school.

Challenge Exam

A challenge exam is developed by Southwest Tech faculty and allows the student to demonstrate that he/she can meet the competencies of the course. Depending on the course, a test may be a standard test or a demonstration test.

Military Experience

Credits may be awarded based on the training taken during military service and/or based on the position held in the military. Southwest Tech uses ACE (American Council on Education) recommendations for military credits.

National Tests

Southwest Tech is a CLEP testing center and accepts several CLEP tests for credit. Other national tests are also accepted including Advanced Placement (AP), DSST (DANTES), and Excelsior as examples.

Industry Recognized Certificate Crosswalks

Employers may offer training in the workplace that leads to an industry recognized certificate. Southwest Tech will recognize certificates that relate to the program courses and meet the competencies of the course.

Portfolios

A portfolio is a detailed documentation illustrating what you have learned and how it relates to a Southwest Tech course.

For more information and how to earn credit for prior learning, visit the credit for prior learning page at www.swtc.edu/cpl.

Accounting

10-101-1 • Associate Degree • 65 Credits

This program is available 100% online.

The Accounting program provides the educational background and training required for entry positions in private business and industry, governmental agencies, and public accounting firms. Students in this program receive a thorough foundation in accounting theory and practice as students learn to perform a variety of business accounting functions. Graduates are prepared for positions as junior accountants in public accounting firms, private industry, or government service.

Possible Careers:

- Bookkeeper
- Cost Accountant
- Public Accountant
- Staff Accountant
- Tax Accountant
- Accounts Receivable/Payable Clerk
- Account Manager
- Account Specialist
- Payroll Accountant
- Governmental Accountant
- Not-for-Profit Accountant

Is This Program for You?

If you are an energetic self-starter, inquisitive, adaptable, analytical, and a forward thinker with good communications skills, you may have what it takes to be successful in the accounting field.

Students entering this program should:

- Have good analytical skills and work well with details.
- Like to organize information.
- Work well under the stress of deadlines.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Process financial transactions throughout the accounting cycle
- Analyze financial and business information to support planning and decision-making
- Perform payroll preparation, reporting, and analysis tasks
- Perform cost accounting preparation, reporting, and analysis tasks
- Perform organizational and/or individual tax accounting preparation, reporting, and analysis tasks
- Identify internal controls to reduce risk
- Utilize computers and calculators as they apply to the accounting profession

Related Degrees and Certificates

- Payroll Assistant Certificate
- Tax Preparer Assistant Certificate
- Accounting Assistant Technical Diploma

Program Basics

- Associate degree requiring a minimum of two years to complete.
- Face-to-face and online classes.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in August or January.
- Modified plans available.
- Articulation agreements in place for transfer to four-year university programs.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		16 CREDITS
10-101-111	Accounting 1	4
10-101-117	Taxes 1	3
10-103-105	Beginning Microsoft Word	1
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel * OR *	
10-103-101	Microsoft PowerPoint	1
10-801-196	Oral/Interpersonal Communication	3
10-809-199	Psychology of Human Relations	3

SEMESTER 2		17 CREDITS
10-101-112	Accounting 2	4
10-101-121	Advanced Accounting Spreadsheets	3
10-101-123	Payroll Applications	2
10-101-127	QuickBooks	1
10-102-133	Career Planning in Business	1
10-801-195	Written Communication * OR *	
10-801-136	English Composition 1	3
10-804-123	Math with Business Applications	3

SEMESTER 3		16 CREDITS
10-101-113	Accounting 3	4
10-101-116	Cost Accounting	3
10-101-125	Managerial Accounting	3
10-102-109	Business Law I	3
10-809-172	Introduction to Diversity Studies	3

SEMESTER 4		16 CREDITS
10-101-114	Accounting 4	4
10-101-118	Taxes 2	3
10-101-124	Accounting Systems and Procedures	3
10-801-197	Technical Reporting	3
10-809-195	Economics	3

Accounting Assistant

31-101-1 • Technical Diploma • 33 Credits

This program is available 100% online.

The Accounting Assistant program trains students in basic accounting for sole proprietorships, partnerships, and corporations. Students also study income tax preparation for individuals, payroll accounting, and computerized accounting. They can then choose to specialize in business taxation or business spreadsheet applications.

Accounting Assistant graduates may work in a small business and be responsible for various aspects of bookkeeping, or work in a larger firm under the supervision of an accountant, and specialize in a certain area.

Possible Careers:

- Account Clerk
- Bookkeeper
- Office Assistant
- Tax Accountant
- Payroll Accountant
- Accountant
- Accounts Receivable/Payable Clerk

Is This Program for You?

Good analytical skills and the ability to work independently will give you a good start in the Accounting Assistant program. If you are adaptable, energetic, organized, detail-oriented and a good communicator, you may thrive in today's accounting profession.

Students entering this program should:

- Enjoy working with detail.
- Have a background or interest in mathematics, communications, and accounting.
- Like system and order.
-

Program Outcomes

- At the completion of this program, students are expected to be able to:
- Process financial transactions throughout the accounting cycle
- Analyze basic financial and business information to support planning and decision-making
- Perform payroll preparation, reporting, and analysis tasks

Related Degrees and Certificates

- Payroll Assistant Certificate
- Tax Preparer Assistant Certificate
- Accounting Associate Degree

Program Basics

- Technical diploma - one year or more to complete.
- Day and evening classes.
- Available in Face-to-face and online class formats.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in August or January.
- Associate degree accounting program can be completed in one additional year.
- Modified plan available.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		16 CREDITS
10-101-111	Accounting 1	4
10-101-117	Taxes 1	3
10-103-105	Beginning Microsoft Word	1
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel * OR *	
10-103-101	Microsoft PowerPoint	1
10-801-196	Oral/Interpersonal Communication	3
10-809-199	Psychology of Human Relations	3

SEMESTER 2		17 CREDITS
10-101-112	Accounting 2	4
10-101-118	Taxes 2 * OR *	
10-101-121	Advanced Accounting Spreadsheets	3
10-101-123	Payroll Applications	2
10-101-127	QuickBooks	1
10-102-133	Career Planning in Business	1
10-801-195	Written Communication * OR *	
10-801-136	English Composition 1	3
10-804-123	Math with Business Applications	3

Agribusiness, Science & Technology- Agribusiness Management

10-006-7 • Associate Degree • 63 Credits

Combine business and science to help farmers produce a product and make a profit.

As a student in the Agribusiness Science & Technology-Agribusiness Management program, you'll learn: agricultural input supply, production, finance, commodity assembly and processing, and marketing

You may also choose from electives in animal and plant sciences to prepare for managerial careers in agriculture.

Possible Careers:

- **Sales Representative:** Solicits and communicates with potential customers and follows up to assure customer satisfaction.
- **Service Representative:** Samples and analyzes soils and feeds and recommends corrective measures.
- **Manager Trainee:** Works in areas of sales, promotion, personnel, finance, and administration.
- **Crop Specialist:** Works with farmers in evaluating crops, recommending alternative practices and chemicals.

Is This Program for You?

Do you enjoy both business and agriculture? Do you work well as part of a team? Are you a problem solver, analytical thinker, and a strong communicator? If so, the Agribusiness Science & Technology-Agribusiness Management program may be a great fit for you.

Students entering this program should:

- Have good oral and written communication skills.
- Enjoy working with people.
- Be willing to try new and innovative ideas.
- Have a good understanding of agriculture.
- Enjoy science and mathematics.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Analyze opportunities in agriculture.
- Apply relevant technologies.
- Demonstrate professionalism skills within the agricultural career areas.
- Develop a management plan in agriculture.
- Apply economic and marketing strategies to agribusiness industry.

Related Degrees

- Agribusiness Science & Technology-Agronomy
- Agribusiness Science & Technology-Animal Science
- Farm Operations & Management-Ag Mechanics
- Farm Operations & Management-Dairy

Program Basics

- Associate degree - requiring a minimum of two years to complete
- Classes are offered daytime, face to face, and on campus
- Fall or Spring Start
- Financial aid eligible
- Credit for prior learning may be available
- High school articulation courses accepted

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
10-006-159	Agribusiness Computer Applications	1
10-006-161	Career Development in Agriculture	1
10-006-180	Animal Science	3
10-093-101	Plant and Soil Science	3
10-103-106	Beginning Microsoft Excel	1
10-801-195	Written Communication	3
10-804-123	Math with Business Applications	3

SEMESTER 2		14 CREDITS
10-006-113	Precision Ag Technologies	3
10-006-133	Agribusiness Financial Management	3
10-006-136	Agricultural Commodity Marketing	3
10-070-104	Ag Safety, Electrical & Maintenance	2
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 3		3 CREDITS
10-006-197	Agribusiness Experiential Learning	3

SEMESTER 4		16 CREDITS
10-006-134	Agricultural Equipment Management	3
10-006-137	Agribusiness Marketing & Promotion	3
10-006-162	Agribusiness Operations	3
10-101-111	Accounting 1	4
10-809-199	Psychology of Human Relations	3

SEMESTER 5		15 CREDITS
10-006-164	Agriculture Law	3
10-006-167	Agriculture Risk Management	3
10-102-129	Human Resources Management	3
10-104-105	Selling Principles	3
10-809-172	Introduction to Diversity Studies	3

Agribusiness, Science & Technology-Agronomy

10-006-5 • Associate Degree • 64 Credits

The curriculum offers the opportunity to manage, create, and produce crops by using correct agronomy principles and techniques. The student will obtain skills in crop protection, soil science, pest control, precision ag, and sustainable agriculture. This program also emphasizes in sales/service of ag materials and maintenance of agriculture equipment.

Possible Careers:

- Sales Representative: Solicits and communicates with potential customers and follows up to assure customer satisfaction.
- Service Representative: Samples and analyzes soils and feeds and recommends corrective measures.
- Manager Trainee: Works in areas of sales, promotion, personnel, and administration.
- Crop Specialist: Works with farmers in evaluating crops, recommending alternative practices and chemicals.

Is This Program for You?

Do you enjoy business and agriculture? Do you work well independently, as well as in a team setting? Are you a problem solver, analytical thinker, and a strong communicator? If so, the Agribusiness Science & Technology-Agronomy program may be a great fit for you.

Students entering this program should:

- Have a strong attention to detail.
- Enjoy working with people.
- Be willing to try new and innovative ideas.
- Have a good understanding of agriculture.
- Enjoy science and mathematics.
-

Program Outcomes

At the completion of this program, students are expected to be able to:

- Analyze opportunities in agriculture.
- Apply relevant technologies.
- Demonstrate professionalism skills within the agricultural career areas.
- Develop a management plan in agriculture.
- Develop a crop management plan.

Related Degrees

- Agribusiness Science & Technology-Animal Science
- Agribusiness Science & Technology-Agribusiness Management
- Farm Operations & Management-Ag Mechanics

Program Basics

- Associate degree - requiring a minimum of two years to complete
- Classes are offered daytime, face to face, and on campus
- Fall or Spring Start
- Financial aid eligible
- Credit for prior learning may be available
- High school articulation courses accepted

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
10-006-116	Introduction to Soils	3
10-006-159	Agribusiness Computer Applications	1
10-006-160	Plant Science	3
10-006-161	Career Development in Agriculture	1
10-103-106	Beginning Microsoft Excel	1
10-801-195	Written Communication	3
10-804-123	Math with Business Applications	3

SEMESTER 2		18 CREDITS
10-006-113	Precision Ag Technologies	3
10-006-124	Pesticide Applicator Training	1
10-006-125	Crop Protection Products	2
10-006-126	Pest ID & Mgt/Crop Scouting	3
10-006-127	Soil Fertility and Fertilizers	2
10-070-101	Field Application Equipment	2
10-070-104	Ag Safety, Electrical & Maintenance	2
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 3		3 CREDITS
10-006-197	Agribusiness Experiential Learning	3

SEMESTER 4		16 CREDITS
10-006-132	Spatial Data Collection in Agriculture	2
10-006-162	Agribusiness Operations	3
10-093-102	Grain Production & Management	3
10-093-103	Forage Production & Management	3
10-093-104	Applications of GIS in Agriculture	2
10-809-199	Psychology of Human Relations	3

SEMESTER 5		12 CREDITS
10-006-117	Agribusiness Performance Standards	3
10-093-105	Nutrient Management & Precision Planning	3
10-104-105	Selling Principles	3
10-809-172	Introduction to Diversity Studies	3



Agribusiness, Science & Technology- Agronomy Technician

31-006-3 • Technical Diploma • 36 Credits

Agronomists today are involved with producing food, creating healthier food, managing environmental impact of agriculture, and extracting energy from plants.

As a student in the Agribusiness Science & Technology-Agronomy Technician program, you'll learn about:

- biotechnology
- plant breeding
- soil science
- pest control
- precision farming
- sustainable agriculture

Possible Careers:

- Custom Application Specialist
- Crop Scouting Specialists
- Soil Sampling Specialists

Students entering this program should:

- Have a strong attention to detail.
- Enjoy working with people.
- Be willing to try new and innovative ideas.
- Have a good understanding of agriculture.
- Enjoy science and mathematics.

Related Degrees:

- Agribusiness Science & Technology-Agronomy
- Agribusiness Science & Technology-Animal Science
- Agribusiness Science & Technology-Agrribusiness Management

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1 15 CREDITS

10-006-116	Introduction to Soils	3
10-006-159	Agribusiness Computer Applications	1
10-006-160	Plant Science	3
10-006-161	Career Development in Agriculture	1
10-103-106	Beginning Microsoft Excel	1
10-801-195	Written Communication	3
10-804-123	Math with Business Applications	3

SEMESTER 2 18 CREDITS

10-006-113	Precision Ag Technologies	3
10-006-124	Pesticide Applicator Training	1
10-006-125	Crop Protection Products	2
10-006-126	Pest ID & Mgt/Crop Scouting	3
10-006-127	Soil Fertility and Fertilizers	2
10-070-101	Field Application Equipment	2
10-070-104	Ag Safety, Electrical & Maintenance	2
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 3 3 CREDITS

10-006-197	Agribusiness Experiential Learning	3
------------	------------------------------------	---



Agribusiness, Science & Technology- Animal Science

10-006-6 • Associate Degree • 64 Credits

Specialize in the animal side of the farm operation. Prepare for the field of marketing, sales and production of animal products, and animal management operations

What you will learn:

- Animal Nutrition
- Healthy and Efficient Livestock Environment
- Milk and Meat Quality
- Reproduction Techniques and Artificial Insemination
- Farm Records and Analysis
- Soils and Forage Crop Production

Possible Careers:

- Herds Person for Livestock operations
- Reproductive Specialist
- A.I. Technician
- Feed Sales
- Milk Quality and Meat Quality Specialist
- Livestock Care Specialist

Is This Program for You?

Do you enjoy animals and agriculture? Do you work well independently, as well as in a team setting? Are you a problem solver, analytical thinker, and a strong communicator? If so, the Agribusiness Science & Technology – Animal Science program may be a great fit for you.

Students entering this program should:

- Have a strong attention to detail.
- Be willing to try new and innovative ideas.
- Have a good understanding of agriculture.
- Enjoy science and mathematics.
-

Program Outcomes

At the completion of this program, students are expected to be able to:

- Create a livestock Management Plan
- Analyze opportunities in Agriculture
- Apply Relevant Technology
- Demonstrate professionalism skills within the agricultural career areas
- Develop a management plan in agriculture

Related Degrees

- Agribusiness Science & Technology – Agronomy
- Agribusiness Science & Technology – Agribusiness Management
- Agribusiness Science & Technology – Agronomy Technician
- Agribusiness Science & Technology – Applicator Technician

Program Basics

- Associate degree - requiring a minimum of two years to complete
- Classes are offered daytime, face to face, and on campus
- Fall or Spring Start
- Financial aid available
- Credit for prior learning may be available
- High school articulation courses accepted

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
10-006-159	Agribusiness Computer Applications	1
10-006-161	Career Development in Agriculture	1
10-006-180	Animal Science	3
10-093-101	Plant and Soil Science	3
10-103-106	Beginning Microsoft Excel	1
10-801-195	Written Communication	3
10-804-123	Math with Business Applications	33

SEMESTER 2		16 CREDITS
10-006-123	Artificial Insemination Training	1
10-006-150	Farm Animal Reproduction	3
10-070-104	Ag Safety, Electrical & Maintenance	2
10-080-117	Animal Nutrition & Ration Balancing	4
10-080-118	Introduction to Animal Health	3
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 3		3 CREDITS
10-006-197	Agribusiness Experiential Learning	3

SEMESTER 4		18 CREDITS
10-006-146	Milk Production * OR *	
10-006-147	Meat Quality	3
10-006-162	Agribusiness Operations	3
10-080-119	Livestock Housing & Equipment	3
10-080-120	Animal Genetics	3
10-093-106	Crop Production & Management	3
10-809-199	Psychology of Human Relations	3

SEMESTER 5		12 CREDITS
10-006-117	Agribusiness Performance Standards	3
10-006-153	Dairy Production Management * OR *	
10-006-157	Livestock Production Management	3
10-082-101	Automation in Agriculture	3
10-809-172	Introduction to Diversity Studies	3

Agricultural Power & Equipment Technician

32-070-1 • Technical Diploma • 62 Credits

Agricultural equipment has become more complex, precise, and expensive, and it is becoming more difficult for individuals to repair their own equipment. Students in this program learn the theory, operation, and repair of a variety of tillage, planting, and harvesting equipment, as well as tractors. Students study diesel engines, drivetrains, electrical systems, and hydraulics. This program prepares students to be employed as technicians at farm implement dealerships, repair shops, businesses that use farm equipment or diesel engines, or to work on their own equipment.

Possible Careers:

- Farm Equipment Technician
- Diesel Equipment Technician
- Mobile Equipment Technician
- Service Writer
- Parts Department Personnel

Is This Program for You?

If you have a love of farm machinery and good mechanical skills, are detail-oriented and enjoy problem-solving challenges, Agricultural Power & Equipment Technician may be a good fit for you.

Students entering this program should:

- Have an interest in machinery and a good mechanical aptitude.
- Have reading skills in order to understand complex manuals.
- Have good math skills.
- Be self-motivated.
- Work well with others.
- Work well independently.
- Be able to lift 75 pounds.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Repair electrical systems
- Analyze an electronic system
- Repair hydraulic systems
- Follow industry safety standards
- Repair power trains/transmissions
- Repair internal combustion engines

Program Basics

- Technical diploma - requiring a minimum of two years to complete.
- Day classes.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in August and January.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
31-801-310	Workplace Communication	2
31-804-305	Applied Mathematics	2
32-070-305	Intro to Ag Electrical Systems	3
32-070-309	Farm Machinery Maintenance	5
32-070-314	Ag Shop Safety & Practices	1
32-442-301	Related Welding	2

SEMESTER 2		15 CREDITS
32-070-341	Basic Hydraulics	4
32-070-346	Consumer Equipment Maintenance & Repair	3
32-070-347	Farm Equipment I	3
32-070-348	Farm Equipment II	3
32-806-303	Science of Mechanics	2

SEMESTER 3		2 CREDITS
32-070-350	Ag Power Occup Internship	2

SEMESTER 4		16 CREDITS
32-070-301	Farm Machinery (Harvesting)	5
32-070-303	Chassis and Drive Systems	5
32-070-344	Air Conditioning	2
32-070-345	Advanced Electrical Systems	4

SEMESTER 5		14 CREDITS
32-070-311	Diesel Engines I	5
32-070-312	Diesel Engines II	5
32-070-343	Applied Hydraulics	4

Artisanal Modern Meat Butchery

30-316-3 • Technical Diploma • 13 Credits

The need for qualified animal handling and meat processing employees is in high demand throughout the USA. The WI Department of Agriculture, Trade and Consumer Protection has provided funding for interested students to complete this technical diploma. As a student in the Artisanal Modern Meat Butchery program, you'll learn about the meat production industry – from care and handling pre-mortem through packaged products ready for retail sale. In this program, you will also participate in an internship with a local meat processing facility, butcher shop, or harvester. Skills learned include:

- Meat industry knowledge and history
- Humane handling practices, selection, and care of animals
- Carcass fabrication, identification, and further processing methods
- Meat labeling, packaging, and retail operations
- Food safety and sanitation practices following ServSafe principles

Students who complete the Artisanal Modern Meat Butchery program can utilize this education to:

- Begin a career as a butcher or slaughter-person
- Continue post-secondary education in animal sciences
- Utilize skills for at-home or on-farm processing and storage

Students entering this program should:

- Be able to lift 30 pounds
- Have respect for the care and humane handling of animals
- Pay attention to details and neatness
- Prioritize safety and sanitation
- Enjoy animal anatomy
- Have good hand-eye coordination
- Think creatively

Program Outcomes

At the completion of this program, students are expected to be able to:

- Examine components of a farm-to-table meat production system.
- Prepare whole muscle and value-added products for consumption.
- Merchandise meat for sale.
- Properly handle and store meat in accordance with HACCP principles.

Program Basics

- Short-term Technical Diploma: Three classes in the spring semester of 2024 and one class and internship in the summer semester of 2024.
- Hybrid Classes: Eight in-person labs on Saturdays, five inperson field trips, and limited weekday online coursework.
- Grant Funded: Full tuition for this program is available on a limited basis, thanks to Department of Agriculture, Trade, and Consumer Protection Meat Talent Development grant.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		13 CREDITS
330-316-301	Introduction to the Meat Industry	1
30-316-302	Humane Handling, Slaughter, and Fabrication	2
30-316-303	Processed Meat Manufacturing	2
30-316-304	Meat Marketing and Merchandising	2
30-316-305	Artisanal Modern Meat Butchery Internship	3



Auto Collision Repair & Refinish Technician

31-405-1 • Technical Diploma • 32 Credits

The Southwest Tech Auto Collision Repair & Refinish Technician program is accredited by the National Institute for Automotive Service Excellence (ASE) Education Foundation.

Each year American drivers log millions of miles on the highways, and each year there are thousands of accidents that will require the service of a trained technician to repair these vehicles. The Auto Collision Repair & Refinish program teaches students to examine vehicles to determine type and extent of damaged parts, both cosmetic and structural. This program is fast-paced and intensive, as today's complex vehicles are constructed with high strength steel, plastics and computer systems. During the year, the student learns mig welding, straightening techniques, proper use of plastic fillers, surface preparation, and refinishing techniques. This program is certified by the National Institute for Automotive Service Excellence (ASE) Education Foundation.

Possible Careers:

- Auto Body Technician
- Frame and Alignment Technician
- Painting Technician
- Auto Glass Replacement Specialist
- Estimator
- Custom Painter
- Paint and Equipment
- Insurance Adjustor

Is This Program for You?

If you are driven, highly motivated, love cars, possess a keen eye for detail, and love hands-on work, this field may be just the career for you.

Students entering this program should:

- Enjoy working on all types of cars.
- Work well with details and have good hand dexterity.
- Have good communication and human relation skills.
- Be able to lift 60 pounds and have good vision.
- Like the challenge of fixing things.
- Appreciate the beauty of returning an auto to pre-accident condition.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Straighten collision damaged sheet metal
- Refinish automobile body parts
- Replace non-structural panels and parts
- Perform collision repair welding procedures

Program Basics

- Technical diploma, requiring a minimum of one year to complete.
- Day classes.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in the fall.
- ASE Master Certified program.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		17 CREDITS
31-404-337	Auto Body Mechanics Chassis	2
31-404-347	Electrical Fundamentals	2
31-405-356	Auto Body Welding	3
31-405-364	Buffing & Detailing	2
31-405-365	Bolt-On Panels & Dent Repair	4
31-405-366	Fundamentals of Painting	2
31-804-305	Applied Mathematics	2

SEMESTER 2		15 CREDITS
31-404-338	Auto Body Mechanics HVAC & Restraints	2
31-405-367	Damage Analysis, Estimating, & Customer Service	3
31-405-368	Structural Repair	3
31-405-369	Intermediate Painting	2
31-405-370	Advanced Painting	3
31-801-310	Workplace Communication	2

Automotive Technician

32-404-2 • Technical Diploma • 60 Credits

The Southwest Tech Automotive Technician program is accredited by the National Institute for Automotive Service Excellence (ASE) Education Foundation.

The Automotive Technician program teaches students essential servicing techniques, including the testing, repairing, and rebuilding of basic automotive systems, as well as diagnosis and repair of automotive and light truck electrical, mechanical, and hydraulic systems. Individuals who are mechanically talented, like to solve problems, and enjoy working with people may find success in the automotive technician field. This program is certified by the National Institute for Automotive Service Excellence (ASE) Education Foundation.

Possible Careers:

- Auto Technician
- Auto Specialist
- Parts Specialist
- Service Manager

Is This Program for You?

Do you love problem solving and diverse work? Are you detail-oriented and ambitious? If you possess these attributes and you love cars and trucks, you may have what it takes to pursue a career as an auto technician.

Students entering this program should:

- Be mechanically inclined.
- Have good reading and math skills.
- Be able to get along with other people.
- Think logically.
- Pay attention to details.
- Be able to lift 50 pounds.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Service brake systems.
- Service electrical/electronic systems.
- Perform engine performance service.
- Service steering and suspension systems.
- Service automatic transmissions and transaxles.
- Perform engine repair service.
- Service heating and air conditioning systems.
- Service manual drive trains and axles.
- Exhibits a level of professionalism appropriate to an entry level technician.

Program Basics

- Technical diploma, requiring a minimum of two years to complete.
- Day classes.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in August.
- ASE Master Certified program.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
31-804-305	Applied Mathematics	2
32-404-310	Auto Electrical I	3
32-404-314	Automotive Maintenance	3
32-404-334	Automotive Service Fundamentals	3
32-404-335	Automotive Brakes	3
32-404-336	Advanced Braking Systems	1

SEMESTER 2		15 CREDITS
32-404-311	Auto Electrical II	3
32-404-315	Engine Repair	5
32-404-322	Suspension & Steering	5
32-806-303	Science of Mechanics	2

SEMESTER 3		2 CREDITS
32-404-350	Auto Tech Occupational Internship	2

SEMESTER 4		13 CREDITS
32-404-312	Auto Electrical III	3
32-404-323	Emission Control Systems	2
32-404-324	Automotive Computer Control Systems	4
32-404-326	Auto Engine Performance	4

SEMESTER 5		15 CREDITS
31-801-310	Workplace Communication	2
32-404-321	Automatic Transmissions	5
32-404-325	Manual Drivetrains & Axles	5
32-404-332	Heating and Air Conditioning	3

Building Performance Technician

31-481-1 • Technical Diploma • 32 Credits

The Building Performance Technician technical diploma prepares individuals to design an integrated portfolio of renewable and traditional energy-producing systems. Technicians perform site assessments and recommend appropriate renewable energy technologies, sell and/or market renewable energy technologies, and manage renewable energy installation projects.

Possible Careers:

- Construction and Building Inspectors
- Energy program coordinator
- Energy Auditors
- Control System Specialist
- Energy Conservation Representative
- Environmental Field Technician
- Weatherization Inspectors

Helpful Academic Background

- Math and science
- Written and oral communications
- Electricity, electronics or mechanics

Program Outcomes

At the completion of this program, students are expected to be able to:

- Evaluate renewable, fossil and other energy resources in context of sustainability, environment, society and economics
- Evaluate building performance and energy use
- Recommend building/site solutions to optimize performance
- Install equipment and materials to optimize performance
- Monitor equipment and systems

Program Basics

- Technical Diploma, requiring a minimum of one year to complete.
- Online learning, face-to-face classes.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in August.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		14 CREDITS
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-410-101	Construction Fundamentals	3
10-481-101	Solar Photovoltaic Technology	3
10-481-102	Introduction to Renewable Energy	3
10-660-101	Introduction to DC/AC	3

SEMESTER 2		18 CREDITS
10-102-152	Data Analytics 1	3
10-196-215	Project Management Fundamentals	3
10-481-103	Intro to Energy Management	3
10-481-105	Energy Control Strategies	3
10-801-196	Oral/Interpersonal Communication	3
10-809-172	Introduction to Diversity Studies	3



Building Trades—Carpentry

31-475-1 • Technical Diploma • 28 Credits

Building Trades-Carpentry students are trained to construct residential structures using both standard and sustainable building materials. Students will prepare for this career through a blend of classroom theory and hands-on experience. Students will become adept at using hand tools, portable power tools, and other equipment common in the carpentry profession, as well as working with lumber, panel products, concrete, roofing materials, fasteners, and a variety of hardware. The skills needed for site layout and foundation work, rough framing, roof framing, and exterior and interior finish work will also be developed. In addition, blueprint reading, math, and estimating components will be studied.

Possible Careers:

The U.S. Department of Labor and the Wisconsin Department of Workforce Development statistics show that carpenters will continue to be in strong demand as both one of the top 30 occupations with the most annual openings and occupations with the most employed. Local job market data also supports the need for entry-level carpenters who have a good foundational background of knowledge and skills along with a desire to work. Carpenters may work alone or for small or large contractors. They may specialize in certain aspects of the trade such as rough or finish carpentry, remodeling, or repair work. They may build residential, agricultural, and/or commercial buildings.

Is This Program for You?

Do you like making things and working with your hands? Are you detail-oriented and do you enjoy physical work in the outdoors? A career in Building Trades-Carpentry may be for you.

Students entering this program should:

- Enjoy hard physical work.
- Enjoy working outdoors at times.
- Be able to lift 100 pounds.
- Have good hand eye coordination.
- Be concerned with detail and accuracy.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Use hand and power tools and equipment
- Apply industry recognized safety practices and procedures
- Analyze sustainable building practices
- Interpret construction drawings
- Interpret building codes
- Demonstrate industry building practices and material application
- Attain the OSHA 10-hour Construction Certification as an orientation to occupational safety and health for workers.

Program Basics

- Technical diploma, requiring a minimum of one year to complete.
- Day classes.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in August.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
31-408-308	Construction Safety and Health	1
31-475-312	Introduction to Building Trades	1
31-475-313	Site Layout, Foundations and Formwork	2
31-475-314	Floor and Wall Framing	3
31-475-315	Blueprint Reading	2
31-475-316	Roof Systems	2
31-475-317	Exterior Finishes	2
31-804-305	Applied Mathematics	2

SEMESTER 2		13 CREDITS
31-475-318	Residential Estimating	2
31-475-319	Building Science and Sustainability	1
31-475-320	Insulation, Drywall Installing & Finishing	2
31-475-321	Cabinet Construction and Installation	1
31-475-322	Interior Finishes and Stair Construction	3
31-475-323	Windows, Doors, and Hardware Installation	2
31-801-310	Workplace Communication	2



Business Management

10-102-3 • Associate Degree • 60 Credits

This program is available 100% online.

The Business Management program provides students with the tools needed to meet the challenges of managing a business. Students receive a background in business operations, accounting, marketing, service operations management, human resource management, team building, problem solving, and business law. Business managers are found in every sector of the economy, in nearly all work settings. Graduates may find positions as an entry-level manager, assistant manager, office manager, team leader, or may start their own business.

The Business Management program may be completed during the day, in the evening, online, or through a combination of these options.

Is This Program for You?

If you set goals for yourself and strive to accomplish them, prefer working with others rather than alone, enjoy serving as a leader even if it means more work, and want to improve your skills and promotion potential, then a career in business management may be a good choice for you.

Students entering this program should:

- Enjoy working with numbers and details.
- Enjoy working with people.
- Be able to make decisions.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Plan the operations of a business across functional areas
- Organize resources to achieve the goals of the organization
- Direct individuals and/or processes to meet organizational goals
- Control business processes

Program Basics

- Associate degree, requiring a minimum of two years to complete.
- Classes are offered during the day, evening, online or any a combination that works for you.
- High school articulation courses accepted.
- Financial aid available.
- Program starts in August or January, and is available in online as well as modified plan formats.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
10-102-105	Introduction to Business	3
10-102-131	Developing a Business Plan	1
10-102-151	Personal Finance	1
10-103-105	Beginning Microsoft Word	1
10-801-195	Written Communication * OR *	
10-801-136	English Composition 1	3
10-804-123	Math with Business Applications * OR *	
10-804-195	College Algebra with Applications	3
10-809-195	Economics	3

SEMESTER 2		14 CREDITS
10-101-111	Accounting 1	4
10-102-109	Business Law I	3
10-102-130	Management Principles	3
10-103-106	Beginning Microsoft Excel	1
10-104-130	Marketing Principles	3

SEMESTER 3		16 CREDITS
10-102-104	Principles of Finance	3
10-102-110	Business Law 2	3
10-102-129	Human Resources Management	3
10-102-133	Career Planning in Business	1
10-809-143	Microeconomics	3
10-809-199	Psychology of Human Relations * OR *	
10-809-198	Intro to Psychology	3

SEMESTER 4		15 CREDITS
10-102-108	Risk Management	3
10-102-115	Business Management Strategies	3
10-102-132	Operations Management	3
10-104-105	Selling Principles	3
10-801-198	Speech	3

Cancer Information Management

10-530-5 • Online Associate Degree • 62 Credits

This program is 100% online.

Cancer registrars are data information specialists who collect and report cancer statistics. Cancer registrars capture a complete history, diagnosis, treatment, and health status for every cancer patient in the U.S.

Cancer registrars collect the data that provides essential information to researchers, healthcare providers, and public health officials to better monitor and advance cancer treatments, conduct research, and improve cancer prevention and screening programs.

- Identify cases
- Manage the cancer registry database
- Ensure data completeness
- Comply with standards
- Analyze and present data
- Run customized reports
- Inform community needs assessments
- Track patient survival data

The Southwest Tech Cancer Information Management program is accredited by the National Cancer Registrars Association (NCRA).

Employment Opportunities:

- Hospital cancer programs
- Cancer treatment centers
- Oncology physician group practices
- Military and Department of Veterans Affairs hospitals
- State and federal cancer registries
- Companies providing cancer registry software
- Contract cancer registry service providers

Students entering this program should:

- Be interested in working in health care, but not directly with patients.
- Be detail oriented.
- Have an aptitude for science, but also like management, law, and computers.
- Enjoy working with professionals: physicians, nurses, lawyers, administrators and executives.
- Have a strong knowledge of medical terminology.
- Employ good critical thinking and communication skills.

Program Outcomes

- Demonstrate knowledge of the cancer program organization's structure, operations and functions including Cancer Conference, Cancer Committee and Commission on Cancer.
- Define the standard setters, agencies and organizations involved in cancer data abstraction and data standardization, as well as their responsibilities.
- Apply fundamental concepts of the oncology disease process incorporating diagnostic and staging procedures (lab, imaging, surgery and pathology) and treatment modalities (surgery, chemotherapy, radiation therapy and immunotherapy) with an emphasis of major cancer sites.
- Analyze documentation to identify and report neoplasms, patient demographics, code diagnostic findings and cancer information including primary site, histology, stage and treatment.
- Monitor and maintain case abstraction through annual lifetime follow up for treatment, recurrence, cancer status and patient status for outcome information.
- Conduct statistical analysis and prepare data presentations related to epidemiology, incidence, quality measures and survival outcomes.
- Graduates are eligible to take the national certification exam with the National Cancer Registrars Association (NCRA).

Program Basics

- Associate degree, requiring a minimum of two years to complete.
- All courses offered online allowing for 100% flexibility.
- Financial aid is available to those that qualify
- Students must achieve a grade of C or better in each course of the program curriculum to be eligible to progress
- Credits transferrable for a Bachelor's degree in Health Information Management

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		7 CREDITS
10-501-101	Medical Terminology	3
10-806-177	Gen Anatomy & Physiology	4

SEMESTER 2		15 CREDITS
10-501-107	Digital Literacy for Healthcare	2
10-530-162	Foundations of HIM	3
10-801-195	Written Communication	3
10-801-196	Oral/Interpersonal Communication	3
10-806-179	Adv Anatomy & Physiology	4

SEMESTER 3		15 CREDITS
10-530-110	Introduction to Cancer Registry Management	3
10-530-111	Cancer Disease Management	4
10-530-178	Healthcare Law & Ethics	2
10-809-172	Introduction to Diversity Studies	3
10-809-198	Intro to Psychology	3

SEMESTER 4		13 CREDITS
10-530-112	Oncology Coding and Staging	4
10-530-113	Cancer Statistics and Epidemiology	3
10-530-114	Abstracting Principles and Practice I	3
10-530-164	Intro to Health Informatics	3

SEMESTER 5		12 CREDITS
10-530-115	Cancer Patient Follow-up	2
10-530-116	Abstracting Principles and Practice II	3
10-530-117	Cancer Registry Management Practicum	3
10-530-118	CTR Prep	1
10-530-161	Health Quality Management	3

Child Care Services

31-307-1 • Technical Diploma • 30 Credits

This program provides training in planning and implementing developmentally appropriate curriculum for specific age levels, using positive guidance techniques to manage an early childhood classroom, providing for the health, safety and physical needs of the children, and working with parents to provide a link between the Center and the home.

Possible Careers:

With the rise in two-career households and single parent families, the job market for trained childcare workers continues to flourish. Besides entering the job market, individuals who complete this program and decide to continue in the Early Childhood Education associate degree program will be given advanced standing for the completed courses. Graduates of this program may find jobs in the following types of occupations.

- Child Care Teachers: Work in full-day and part-day child care programs, nursery schools, and Head Start programs.
- Child Care Assistant Teachers: Work under the supervision of a childcare teacher.
- Family Child Care Providers: Care for 8 or fewer children in the family child care.
- Infant or Toddler Caregivers: Care for children under two years of age.
- In-home Providers/Nannies: Provide care in the child's home.
- Early Childhood Educational Assistants: Work in district-approved early childhood programs, and four-year-old kindergarten programs.
- Early Childhood Special Needs Assistants: Work in district-approved early childhood programs and four-year-old kindergarten programs.

Is This Program for You?

If you are patient, creative, dependable, and have good communication skills, stimulating the physical, emotional, intellectual, and social growth of young children may be the rewarding career you are looking for.

Students entering this program should:

- Like working with children.
- Be able to communicate well with children and adults.
- Have a caring attitude.
- Be dependable and organized.
- Have good reading skills.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Relate knowledge of child development to practice
- Create relationships with children, family and the community
- Apply observation, documentation and assessment strategies
- Implement developmentally appropriate teaching and learning activities
- Demonstrate professionalism
- Follow health, safety and nutrition practices

Program Basics

- Technical diploma requiring a minimum of one year to complete.
- Courses are available face-to-face and online.
- College up Education pathway for High School students option available.
- Financial aid available.
- Classes start in August.
- Advanced standing for early childhood experience may be granted with Southwest Tech instructor approval.
- Complete First Aid / CPR with AED for Infant/ Children
- Join The Registry of Wisconsin Early Care Professional Development
- Complete the Fieldprint Fingerprinting Check

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
10-307-148	ECE: Foundations of ECE	3
10-307-151	ECE: Infant & Toddler Dev	3
10-307-160	ECE: Field Experience 1	3
10-307-167	ECE: Hlth Safety & Nutrition	3
10-809-172	Introduction to Diversity Studies	3

SEMESTER 2		15 CREDITS
10-307-108	ECE: Early Language & Literacy	3
10-307-170	ECE: Field Experience 2	3
10-307-179	ECE: Child Development	3
10-307-188	ECE: Guiding Child Behavior	3
10-801-195	Written Communication	3

CNC Machine Operator/Programmer

31-444-1 • Technical Diploma • 26 Credits

The CNC program is being offered at the Platteville High School. For more information, please contact your guidance counselor or our Career Prep Coordinator, Mary Johannesen by emailing mjohannesen@swtc.edu.

Today's advanced manufacturing businesses are looking for employees that have experience with tools, machines, and mechanicals.

As a student in the CNC Machine Operator/Programmer program, you'll learn to operate a variety of machine tools, setup, operate, and program CNC machines, read and analyze engineering drawings, and use precision measuring and inspection instruments.

Possible Careers:

Graduates of the CNC Machine Operator/Programmer program are employed as:

- Machinists
- CNC machinists
- Quality control inspector
- CNC Operator
- CNC programmers
- Field service representatives

Students entering this program should:

- Have good reading and math skills.
- Have good hand-eye coordination.
- Pay attention to details and neatness.
- Have a mechanical aptitude.
- Enjoy researching technical information.
- Have good communication skills.
- Enjoy problem solving.
- Think creatively.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Apply basic safety practices in the machine shop
- Interpret industrial/engineering drawings
- Apply precision measuring methods to part inspection
- Perform basic machine tool equipment set-up and operation
- Perform programming, set-up, and operation of CNC Machine Tools

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		13 CREDITS
10-105-110	Computer Applications	1
31-420-320	Intro to Print Reading	1
31-420-321	Machine Shop Safety Practices & Maintenance	1
31-420-322	Intro to Manual Mill	1
31-420-323	Intro to Manual Lathe	1
31-420-324	Manual Machine Speeds & Feeds	1
31-420-325	Tooling & Materials of Manufacturing	1
31-420-326	Intro to Quality Practices & Measurement Equipment	1
31-420-327	Intro to Surface Grinding	1
31-420-328	Intro to Mastercam Mill 2D	1
31-420-329	Advanced Manual Mill	1
31-420-330	Advanced Manual Lathe Machine	1
31-420-331	Advanced Print Reading	1

SEMESTER 2		13 CREDITS
31-420-332	Advanced Measuring Equipment	1
31-420-333	Intro to Mastercam Lathe	1
31-420-334	Intro to Computer Numerical Control Prog Mill	1
31-420-335	Intro to Computer Numerical Control Prog Lathe	1
31-420-336	Basic CNC Operation Mill	1
31-420-337	Basic CNC Operation Lathe	1
31-420-340	Geometric Dimensioning & Tolerance	1
31-420-341	Fixture Basic Lathe & Mill	1
31-420-342	CNC Machine Speeds & Feeds	1
31-420-343	Processes of Manufacturing	1
31-420-344	Advanced Mastercam Mill & Lathe	1
31-420-345	Precision Machining Internship	2



Cosmetology

31-502-1 Technical Diploma • 44 Credits

The Cosmetology program combines theory with practice in the art of haircutting, styling, perm waving and chemical relaxing, haircolor, highlighting, foiling techniques, and nail and skin care. Students gain experience in Southwest Tech's Creative Elements Salon by working on mannequins, fellow students, and salon guests. Students also learn the business aspects of working in a salon, including professional and personal development, business practices, communication, and Wisconsin state law. Lower cost and less time than local competitors. Scholarships available for cosmetology program students.

Possible Careers:

This program prepares graduates for licensing as a Cosmetology Practitioner (hair designer). A Cosmetology student can automatically practice all nail services that a Manicurist performs under the Cosmetology License.

Is This Program for You?

Do you have a love for style, enjoy helping others enhance their appearance and look their best, and enjoy working closely with the public? If you are also friendly, outgoing, and creative, then a career in Cosmetology may be a perfect fit.

Students entering this program should:

- Enjoy working closely with the public.
- Be friendly, outgoing, concerned for other people, and creative.
- Have good communication skills.
- Work well with others.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Perform shampoo, haircut, and style service
- Perform skin care services
- Perform chemical services
- Perform nail services
- Develop business practices for industry success

To graduate and be eligible to take the state licensing exam, students must:

- Complete a minimum of 1550 theory and practical hours of training
- Meet all Southwest Tech program requirements.
- Receive a passing grade of C in all program courses.

Nail Technician

30-502-4 • Technical Diploma • 10 Credits

Completing these courses prepares individuals to take the State of Wisconsin examination to become licensed manicurists. Students enrolled in the Cosmetology Program who also complete the Nail Technician Certificate will only need to take one State licensing exam to be certified in both professional areas.

Note: In order to qualify for licensure for your manicurist state board exam, you must be 18 years of age, have completed a minimum 300 hours of instruction and completed the requirements of Southwest Tech Nail Technology Program.

Program Basics

- Technical diploma requiring three semesters or more to complete.
- Financial aid and scholarships available.
- Special equipment and uniforms required.
- Opportunities to attend professional salon, beauty, & fashion shows.
- Cosmetology students must achieve a grade of C or better in each of the 502 program area courses to be eligible to progress from Semester 1 to Semester 2 and from Semester 2 into Semester 3. Students should check with instructor for updated regulations for taking the state Cosmetology licensure exam.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
31-502-301	Basic Hair Design	5
31-502-302	Salon/Spa Science	2
31-502-303	Chemical Restructuring	2
31-502-304	Haircoloring and Techniques	3
31-502-305	Nail Technology	3

SEMESTER 2		15 CREDITS
31-502-306	Basic Facials	2
31-502-307	Salon/Spa Management	2
31-502-314	Salon Services I - Fundamentals	3
31-502-315	Salon Services II - Basic Concepts	4
31-502-316	Salon Services III - Skill Building	4

SEMESTER 3		14 CREDITS
31-502-317	Salon Services IV - Intermediate Skills	4
31-502-318	Salon Services V - Proficiency Building	5
31-502-319	Salon Services VI - Advanced Techniques	5

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		5 CREDITS
31-502-302	Salon/Spa Science	2
31-502-305	Nail Technology	3

SEMESTER 2		5 CREDITS
31-502-307	Salon/Spa Management	2
31-502-322	Nail Services	3

These courses are not eligible for financial aid unless the student is enrolled in an eligible program. Please see an advisor to determine financial aid eligibility.

Criminal Justice-Law Enforcement 2

10-504-6 • Associate Degree • 70 Credits

The Criminal Justice-Law Enforcement 2 program provides training in protecting lives and property, as well as preserving the peace while upholding the law. As a student in the Criminal Justice-Law Enforcement 2 program, you will learn:

- Patrol procedures for residential, commercial, and industrial areas
- Monitor traffic for safe and legal operations
- How to properly issue warnings, citations, and make arrests
- How to investigate accident and crime scenes
- How to carry out long-term investigations leading to the prosecution of criminal offenders
- Strategies to maintain the confidence of the public by displaying professional conduct

Graduates of this degree may need to have further training to enter certain law enforcement fields. Talk to your advisor about careers you may be interested in.

Possible Careers:

The profession of law enforcement, also known as police science, is becoming very people-oriented. Law enforcement officers spend a great deal of time communicating and interacting with an increasingly diverse population. Officers are more active in community relations and crime prevention, and they must always be able to react immediately to any level of emergency. Criminal Justice-Law Enforcement 2 prepares graduates for careers as:

- Police officers
- Deputy sheriffs
- Security guards
- Bailiffs
- Correctional officers

Each of these careers may require special additional requirements and/or training.

Is This Program for You?

If you are interested in making a difference in your community by providing safety, order and serving those in need, a career in law enforcement may be for you.

Students entering this program should have the following skills and abilities:

- Work professionally and respectfully with diverse populations.
- Strong written and oral communication skills
- Analytical thinking and problem solving skills
- Strong internal motivation and the ability to work independently
- Strong attention to detail with the ability to rapidly perceive and process information
- Work in various work conditions, including inclement weather, holidays, nights and weekends
- Strong moral and ethical background that promotes public service
- Possess the necessary physical, medical, emotional and psychological conditions necessary to meet the requirements of the profession
- The ability to respond to emergency situations in a calm, focused and safe manner
- Remain objective and non-biased in interactions with the public
- Possess driving records and criminal history backgrounds that are free of disqualifying offenses

Program Outcomes

At the completion of this program, students are expected to be able to:

- Recognize the personal demands required of police.
- Demonstrate proper police investigative procedures.
- Demonstrate effective communication with diverse populations.
- Understand legal principles and procedures to ensure justice.
- Apply Wisconsin statutes when analyzing criminal behavior.
- Demonstrate writing skills.
- Practice good personal fitness strategies.
- Practice effective team member attributes.

Program Basics

- Associate degree, requiring a minimum of two years to complete.
- The majority of classes are offered face to face on campus. Some training sessions will be hosted during the evening and outdoors.
- Fall start.
- Financial aid available.
- Credit for prior learning may be available.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
10-504-101	Intro to Criminal Justice Studies	3
10-504-103	Criminal Law Studies	3
10-801-195	Written Communication	3
10-801-196	Oral/Interpersonal Communication	3
10-804-107	College Mathematics	3

SEMESTER 2		14 CREDITS
10-504-102	Constitutional Law Application	3
10-504-107	Criminal Investigation Application	3
10-504-134	Emergency Telecommunicator	2
10-504-154	Community Policing in a Diverse Society	3
10-809-172	Introduction to Diversity Studies	3

SEMESTER 3		14 CREDITS
10-504-120	Homeland Security/Terrorism	3
10-504-127	Emergency Response and Intervention	3
10-504-129	Criminal Evidence	2
10-504-135	Law Enforcement Academy Prep * OR *	
10-504-128	Criminal Justice Internship	3
10-809-198	Intro to Psychology * OR *	
10-809-159	Abnormal Psychology	3

SEMESTER 4		18 CREDITS
10-504-160	Basic Introduction to Policing	2
10-504-161	Basic Police Response	2
10-504-162	Basic Police Tactics	2
10-504-163	Basic Police Investigations	2
10-504-164	Intermediate Police Tactics	3
10-504-165	Intermediate Police Traffic Response	3
10-504-166	Intermediate Police Investigations	4

SEMESTER 5		9 CREDITS
10-504-167	Advanced Police Traffic Response	4
10-504-168	Advanced Police Investigations	3
10-504-169	Academy Scenario Assessment	2



Criminal Justice-Law Enforcement 720 Academy

30-504-2 • Technical Diploma • 24 Credits

This (720) hour Law Enforcement Academy is designed for those seeking a law enforcement career in the State of Wisconsin. Southwest Tech’s premier Academy delivers the criteria established by the Wisconsin Department of Justice, Training and Standards Bureau. The training instructors are a combination of educators and active or retired law enforcement officers. The training is delivered via lecture, group discussion, hands-on exercises, and scenario participation.

Completion of the Law Enforcement Academy makes you eligible for Law Enforcement certification in the State of Wisconsin.

Minimum Qualifications:

Please verify that you have met the following minimum qualifications as set forth in Wisconsin State Statute and Chapter LES 2, of Wisconsin Administrative Code:

- I am a citizen of The United States of America.
- I am or will be at least 18 years of age by the completion of training.
- I possess a valid Wisconsin driver’s license or such other valid operator’s permit recognized by the Wisconsin DOT as authorizing operation of a motor vehicle in Wisconsin.
- I possess a general educational development diploma or am a high school graduate who has completed a secondary education program through a public school, private school, an equivalency diploma program, or home education program within the United States or its territories.
- **I have earned at least 60 associate degree level college credits or higher, or an associate degree or higher from a college or university accredited by an accrediting agency recognized by the US Department of Education.** Completing Southwest Tech’s Criminal Justice Studies associate degree fulfills this requirement. (Law enforcement and tribal law enforcement officers who do not meet this requirement at the time of employment, have 5 years from their date of employment to meet this requirement.)
- I have not been convicted of a federal felony, or of any offense which if committed in Wisconsin could be punished as a felony, and has not been convicted of a misdemeanor crime of domestic violence (18 U.S.C. §922(g)(9)), or I have been granted an absolute and unconditional pardon.

Program Outcomes

- The Law Enforcement 720 Academy is designed to lead to a license for Law Enforcement Officer in the state of Wisconsin.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

		24 CREDITS
30-504-420	Police Concepts	5
30-504-421	Police Tactics	2
30-504-422	Advanced Police Tactics	5
30-504-423	Police Emergency Response	4
30-504-424	Police Investigations	2
30-504-425	Police Traffic Response	3
30-504-426	Police Sensitive Crimes	3



Criminal Justice Studies

10-504-5 • Associate Degree • 61 Credits

The Criminal Justice Studies program provides training in protecting lives and property, as well as preserving the peace while upholding the law. As a student in the Criminal Justice Studies program, you will learn

- Patrol procedures for residential, commercial, and industrial areas
- Monitor traffic for safe and legal operations
- How to properly issue warnings, citations, and make arrests
- How to investigate accident and crime scenes
- How to carry out long-term investigations leading to the prosecution of criminal offenders
- Strategies to maintain the confidence of the public by displaying professional conduct

Graduates of this degree may need to have further training to enter certain Law Enforcement fields. Talk to your advisor about careers you may be interested in.

Possible Careers:

The profession of law enforcement, also known as police science, is becoming very people-oriented. Law enforcement officers spend a great deal of time communicating and interacting with an increasingly diverse population. Officers are more active in community relations and crime prevention, and they must always be able to react immediately to any level of emergency. Criminal Justice Studies prepares graduates for careers as:

- Police officers
- Deputy sheriffs
- Security guards
- Bailiffs
- Correctional officers

Each of these careers may require special additional requirements and/or training.

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

If you're a community service-oriented individual who values honesty, order, and detail, a career in law enforcement may be for you..

Students entering this program should:

- Enjoy working with diverse people.
- Communicate well orally and in written form.
- Be perceptive and analytical.
- Be detail-oriented and patient.
- Not mind working different shifts.
- Have excellent character backgrounds.
- Be in good physical condition.
- Remain objective in emergency situations.
- Have excellent driving records.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Recognize the personal demands required of police.
- Demonstrate proper police investigative procedures.
- Demonstrate effective communication with diverse populations.
- Understand legal principles and procedures to ensure justice.
- Apply Wisconsin statutes when analyzing criminal behavior.
- Demonstrate writing skills.
- Practice good personal fitness strategies.
- Practice effective team member attributes.

Program Basics

- Associate degree, requiring a minimum of two years to complete.
- Classes are offered daytime, face to face, and on campus.
- Fall start.
- Financial aid available.
- Credit for prior learning may be available.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
10-504-101	Intro to Criminal Justice Studies	3
10-504-103	Criminal Law Studies	3
10-801-195	Written Communication	3
10-801-196	Oral/Interpersonal Communication	3
10-804-107	College Mathematics	3

SEMESTER 2		14 CREDITS
10-504-102	Constitutional Law Application	3
10-504-107	Criminal Investigation Application	3
10-504-134	Emergency Telecommunicator	2
10-504-154	Community Policing in a Diverse Society	3
10-809-172	Introduction to Diversity Studies	3

SEMESTER 3		17 CREDITS
10-504-119	Introduction to Corrections	3
10-504-120	Homeland Security/Terrorism	3
10-504-127	Emergency Response and Intervention	3
10-504-129	Criminal Evidence	2
10-504-135	Law Enforcement Academy Prep * OR *	
10-504-128	Criminal Justice Internship * OR *	
10-504-156	Community Service Field Experience	3
10-809-198	Intro to Psychology * OR *	
10-809-159	Abnormal Psychology	3

SEMESTER 4		15 CREDITS
10-503-100	Firefighting Principles	4
10-503-101	Hazmat Awareness & Ops	2
10-504-126	Communication Principles for Emergency Services	3
10-531-105	Emergency Medical Technician 1	3
10-531-106	Emergency Medical Technician 2	3

Dairy and Livestock Technician

31-091-5 • Technical Diploma • 34 Credits

The Dairy and Livestock Technician will prepare you with the knowledge and skills needed to work with animals. Focus is on animal reproduction, nutrition, and health.

Possible Careers

The demand in this field is expected to remain high for several years in such jobs as:

- A.I. technician
- Assistant herds person for a dairy or livestock operation
- Feed specialist on a farm
- Assistant calf barn manager

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Helpful Academic Background

- High school agriculture
- Communication skills
- Science
- Math courses

Students entering this program should:

- Have a strong attention to detail.
- Enjoy working with people.
- Be willing to try new and innovative ideas.
- Have a good understanding of agriculture.
- Enjoy science and mathematics.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Analyze opportunities in agriculture
- Apply relevant technologies
- Demonstrate professionalism skills within the agriculture career areas
- Apply dairy and livestock principles and practices

Related Degrees

- Agribusiness Science & Technology – Agribusiness Management
- Agribusiness Science & Technology - Agronomy
- Agribusiness Science & Technology - Agronomy Technician
- Agribusiness Science & Technology – Animal Science
- Agribusiness Science & Technology - Applicator Technician

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1 15 CREDITS

10-006-159	Agribusiness Computer Applications	1
10-006-161	Career Development in Agriculture	1
10-006-180	Animal Science	3
10-093-101	Plant and Soil Science	3
10-103-106	Beginning Microsoft Excel	1
10-801-195	Written Communication	3
10-804-123	Math with Business Applications	3

SEMESTER 2 16 CREDITS

10-006-123	Artificial Insemination Training	1
10-006-150	Farm Animal Reproduction	3
10-070-104	Ag Safety, Electrical & Maintenance	2
10-080-117	Animal Nutrition & Ration Balancing	4
10-080-118	Introduction to Animal Health	3
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 3 3 CREDITS

10-006-197	Agribusiness Experiential Learning	3
------------	------------------------------------	---

Data Analytics

10-102-1 • Associate Degree • 60 Credits

This program is 100% online.

Join one of the fastest-growing fields, Data Analytics, by earning an Associate Degree in Applied Sciences from Southwest Wisconsin Technical College.

Big data is a huge part of business today. Learning the skills will set you up for a successful career as a data analyst. Graduates of this program are in high demand in many industries, including healthcare, manufacturing, insurance, and finance.

- Learn the role of analyzing data for employers gathering information necessary to identify data needs.
- Apply critical-thinking skills through the use of data.
- Develop effective communication skills with stakeholders through your findings and offer solutions, while recommending opportunities for improvement with the use of data.
- 100% Online Asynchronous Courses– login on anytime anywhere to complete your coursework.
- Flexible schedule – with courses starting every 8 weeks you will focus on mastering specific topics before moving on to new ones.
- All current American Council on Education (ACE) credit recommendations are eligible for prior learning credit evaluation at Southwest Tech.

Helpful Academic Background

- Consumer math
- Algebra
- Computer skills

Program Outcomes

At the completion of this program, students are expected to be able to:

- Perform elicitation, validation, and analysis of requirements to meet a business need
- Interpret and analyze data based on statistical data analysis concepts
- Effectively communicate information in various formats to appropriate audiences
- Value and safeguard the ethical use of data in all aspects of their profession
- Transform findings from data resources into actionable business strategies

Program Basics

- Associate degree requiring a minimum of two years to complete.
- 4 semesters – 60 credits
- 100% online, full or part time. Some courses available on campus.
- Classes start every eight weeks.
- Financial aid available.
- Credit for prior learning may be available.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
10-102-152	Data Analytics 1	3
10-102-153	Elicitation & Collaboration Techniques	3
10-102-154	Databases	3
10-102-156	Ethics in Data Analytics	3
10-804-189	Introductory Statistics	3

SEMESTER 2		12 CREDITS
10-102-155	Business Intelligence & Visualization	3
10-102-157	Data Analytics 2	3
10-196-209	Team Building and Problem Solving	3
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 3		7 CREDITS
10-103-118	Intermediate Microsoft Excel	1
10-809-166	Intro to Ethics: Theory & App	3
10-809-195	Economics	3

SEMESTER 4		12 CREDITS
10-102-130	Management Principles	3
10-102-158	Business Analytics & Insights	3
10-102-160	Software Applications	3
10-196-215	Project Management Fundamentals	3

SEMESTER 5		14 CREDITS
10-102-161	Strategy Analysis & Evaluation	3
10-102-162	Programming in Data Analytics	3
10-102-163	Data Analytics Career Experience- Internship	2
10-623-110	Lean Concepts	3
10-801-197	Technical Reporting	3



Dental Assistant

30-508-2 • Short-Term Technical Diploma • 16 Credits

The Dental Assistant program includes instruction and practical experience on how to use and care for dental equipment instruments, expose and process radiographs, record medical and dental information, assist with dental emergencies, perform basic office procedures, and maintain an inventory of supplies. Dental assistants are vital to the safe and efficient operation of the dental office, assisting the dentist in the treatment room, the lab, and with business administration.

Possible Careers:

This course provides a strong foundation in basic dental assisting. There are job openings for dental assistants in Southwest Wisconsin. More job opportunities are available for graduates willing to relocate to urban areas.

- Receptionist: Works at the front desk and processes invoices, accounts, appointments, and greets patients
- Chair-side Assistant: Assists the dentist with patient care
- Hygiene Instructor: Instructs patients in proper hygiene and tooth care
- Laboratory Assistant: Performs laboratory functions while observing safety
- Hygiene Assistant: Assists the hygienist with tasks
- Dental Sales Representative
- Dental Treatment Coordinator

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Caring, organized, and compassionate individuals who work well in a team health care setting may find a rewarding career as a dental assistant. If you're interested in a career that focuses on helping people and offers plenty of variety in the workday, dental assisting is a great choice for you.

Students entering this program should:

- Have ninth grade reading skills, basic math skills, and good verbal communication skills.
- Be Employable
- Desire to work with people.
- Desire to work as a team member.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Collect diagnostic and treatment data.
- Manage infection and hazard control.
- Perform clinical supportive treatment.
- Take diagnostic radiographs.
- Perform dental laboratory procedures.
- Provide patient oral health instructions.
- Assist in managing medical emergencies.
- Model professional behaviors, ethics and appearance.
- Perform coronal polishing on patients.

Program Basics

- One Semester technical diploma
- This 16-week program includes 12 weeks of classroom and laboratory learning activities, followed by a 4-week externship in a dental clinic.
- Classes run full-time Monday through Friday for 12 weeks.
- The 4-week externship hours are based upon the dental clinic hours as assigned.
- Must earn at least a grade of C in all classroom/ laboratory learning settings to be eligible to work under the direct supervision of a dentist in a four-week externship.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		16 CREDITS
10-508-101	Dental Health Safety	1
10-508-103	Dental Radiography	2
10-508-113	Dental Materials	2
31-508-302	Dental Chairside	5
31-508-304	Dental and General Anatomy	2
31-508-306	Dental Assistant Clinical	3
31-508-307	Dental Assistant Professional	1

Early Childhood Education

10-307-1 • Associate Degree • 60 Credits

The Early Childhood Education program teaches students to implement developmentally-appropriate activities for children aged infant through eight years old. A focus on maintaining a safe and healthy environment, building relationships with parents and staff, and guiding children's behavior is emphasized. With an on-campus daycare facility, students have the opportunity to put theory into practice before embarking on a rewarding career.

Possible Careers:

Employment in the childcare industry will grow well into the future. Potential jobs may include:

- Child Care Teachers Work in full-day and part-day child care programs, nursery schools, and Head Start programs.
- Child Care Assistant Teachers Work under the supervision of a childcare teacher.
- Family Child Care Providers Care for 8 or fewer children in the provider's home.
- Infant or Toddler Caregivers Care for children under two years of age.
- In-home Providers/Nannies Provide care in the child's home.
- Early Childhood Educational Paraprofessional Work in school district early childhood programs, and four-year-old kindergarten programs.
- Sub Teacher or Paraprofessional Work in a school district setting as a licensed sub-teacher or teacher assistant.
- Early Childhood Special Needs Paraprofessional Work in school district early childhood programs, and four-year-old kindergarten programs.
- Directors/Administrators Are responsible for managing child care centers and planning and implementing programs.

Southwest Tech's Career Connections Center offers Services to assist students looking for job placement.

Is This Program for You?

If you are patient, creative, dependable, and have good communication skills, stimulating the physical, emotional, intellectual, and social growth of young children may be the rewarding career you are looking for.

Students entering this program should:

- Have a warm and pleasant personality.
- Like working with children and adults.
- Be self-directed and organized.
- Have good management skills.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Apply child development theory to practice
- Cultivate Relationships with children, family and the community
- Assess child growth and development
- Use best practices in teaching and learning
- Demonstrate professionalism
- Integrate health, safety and nutrition practices

Program Basics

- Associate degree, requiring a minimum of two years to complete.
- Day classes.
- High school articulation and college transfer courses accepted.
- Complete First Aid/CPR with AED for Infants/Children
- Join The Registry of Wisconsin Early Care Professional Development
- Complete Fieldprint Fingerprinting Check
- Financial aid available.
- Classes start in August.
- Advanced standing for early childhood experience may be granted.

Note: Students must provide their own transportation to and from a supervised participation site.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
10-307-148	ECE: Foundations of ECE	3
10-307-151	ECE: Infant & Toddler Dev	3
10-307-160	ECE: Field Experience 1	3
10-307-167	ECE: Hlth Safety & Nutrition	3
10-809-172	Introduction to Diversity Studies	3

SEMESTER 2		15 CREDITS
10-307-108	ECE: Early Language & Literacy	3
10-307-170	ECE: Field Experience 2	3
10-307-179	ECE: Child Development	3
10-307-188	ECE: Guiding Child Behavior	3
10-801-195	Written Communication	3

SEMESTER 3		15 CREDITS
10-307-110	ECE: Soc S, Art, & Music	3
10-307-112	ECE: STEM	3
10-307-190	ECE: Field Experience 3	3
10-804-123	Math with Business Applications	3
10-809-198	Intro to Psychology	3

SEMESTER 4		15 CREDITS
10-307-187	ECE: Children w Diff Abilities	3
10-307-195	ECE: Family & Community Rel	3
10-307-210	ECE: Field Experience 4	3
10-801-196	Oral/Interpersonal Communication	3
10-809-128	Marriage & Family	3

Electrical Power Distribution

31-413-2 • Technical Diploma • 31 Credits

Electric lineworkers install and repair cables and wires used in electrical power and distribution systems. They erect poles and light- or heavy-duty transmission towers. They locate line trouble, climb poles, use hot line tools, and operate and maintain substations. This program provides theoretical and hands-on training in all phases of power line construction and maintenance. It provides fundamentals of electrical theory, as well as application of electrical equipment with emphasis on safety.

Potential employers will require you to possess a CDL (Commercial Driver License). Southwest Tech offers a CDL Preparation course to better prepare students to take their CDL permit test, but does not offer a CDL Road Test. For information on how to attain your CDL, please access the Wisconsin Department of Transportation website.

Possible Careers

This program prepares a student to advance to an electric line technician apprenticeship and related occupations. Employment has been excellent for graduates in the following types of jobs:

- Electric Utility Lineman
- Cable Maintenance Technicians
- Equipment Operator
- Telephone Repairman
- Cable TV Installer
- Apprentice Line Technician
- Troubleshooter
- Line Inspectors
- Substation Operator
- Cable Splicer
- Underground Cable Installer

The Southwest Tech Career Connections Center offers Services to assist students looking for job placement.

Is This Program for You?

If you like working outdoors in all kinds of weather, are an independent problem solver, and enjoy the rewards of a hard day's work, Electrical Power Distribution may be the ideal program for you.

Students entering this program should:

- Have an interest in math and science.
- Enjoy problem solving.
- Think creatively.
- Enjoy working with their hands.
- Have good hand-eye coordination.
- Are detail-oriented.
- Be able to lift 50+ lbs.
- Be able to handle extreme temperatures, very hot or very cold.
- Be able to use their hands to hold, control, and feel objects.
- Be willing to work irregular hours (Weekend & Overtime).
- Be able to bend, stretch, twist or reach.

Program Basics

- Technical diploma, nine months to complete.
- Day classes.
- High school articulation courses accepted.
- Classes start in August.
- Financial aid available.
- Students must achieve a "C" grade or better in each core (413) course of the program curriculum to be eligible to progress

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
31-413-303	Electric Power Distribution Fund 1A	4
31-413-304	Electric Power Distribution Fund 1B	4
31-413-305	Electric Power Dist Fund 1C-App Lab	5
31-804-305	Applied Mathematics	2

SEMESTER 2		16 CREDITS
10-105-110	Computer Applications	1
10-620-156	Fiber Optic Cabling Technician	1
31-413-306	Electric Power Dist Fund 2A	4
31-413-307	Electric Power Dist Fund 2B	4
31-413-308	Electric Power Dist Fund 2C-AppLab	4
31-801-310	Workplace Communication	2

Program Outcomes

At the completion of this program, students are expected to be able to:

- Apply electrical theory
- Construct Overhead Electrical Distribution Systems
- Disassemble Overhead Electrical Distribution Systems
- Construct Underground Electrical Distribution Systems
- Construct Overhead Electrical Transmission System
- Disassemble Overhead Electrical Transmission System
- Maintain Electrical Systems
- Disassemble Underground Electrical Distribution Systems
- Demonstrate safe work practices
- Some employers will require CPR and/or First Aid



Electro-Mechanical Technology

10-620-1 • Associate Degree • 66 Credits

In the world of manufacturing, constant technology change brings with it more complex systems of assembly, control measurement, and material processing of manufactured products. The Electro-Mechanical Technology program provides training in electrical and electronic controls, robotics, utilization of computers and computer-based controls, as well as the knowledge of how these controls integrate with hydraulics, pneumatics and other mechanical drive elements to form automated systems.

Possible Careers

Recent graduates of the Electro-Mechanical Technology program are employed in a diverse range of industries and occupations. The list below contains just a few examples of opportunities in one of the fastest growing career fields.

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Are you mechanically inclined and comfortable with computers? Do you have good math skills? Answering “yes” could mean that a rewarding career awaits you in the Electro-Mechanical field.

Students entering this program should:

- Have an interest in math and science.
- Enjoy problem solving.
- Think creatively.
- Enjoy working with their hands.
- Have good hand-eye coordination.
- Enjoy working with people.
- Have good communication skills.
- Are detail-oriented.
- Be interested in becoming an electrician.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Perform work safely
- Troubleshoot electrical and mechanical systems and devices
- Repair electrical and mechanical systems
- Communicate Technical Information
- Setup, Install, and Integrate electrical and mechanical systems and devices

Related Degrees

- Industrial Mechanic
- Instrumentation and Controls Technology

Program Basics

- Associate degree, requiring a minimum of two years to complete.
- Classes are offered, daytime, face to face, and on campus.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in January and August.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		17 CREDITS
10-620-101	DC and AC Fundamentals	5
10-620-121	Mechanics and Materials	4
10-620-123	Construction Electrical Wiring I	1
10-620-124	Welding for Maintenance	2
10-620-138	Construction Electrical Wiring II	1
10-620-163	Intro to Mechatronics	1
10-804-113	College Technical Math 1A	3

SEMESTER 2		17 CREDITS
10-449-160	Industrial Safety Practices & Career Development	1
10-620-107	Hydraulics and Pneumatics	3
10-620-148	Intro to Motor Controls	2
10-620-149	Intro to Programmable Controls	2
10-620-162	Manual Machine Shop Fundamentals	3
10-620-164	Intro to Preventative Maintenance	1
10-804-114	College Technical Math 1B	2
10-809-199	Psychology of Human Relations	3

SEMESTER 3		17 CREDITS
10-150-129	Introduction to Networks	2
10-620-126	Industrial Electrical Wiring	2
10-620-151	Process Control Systems	5
10-620-156	Fiber Optic Cabling Technician	1
10-620-157	Fundamentals of Embedded Systems	1
10-801-136	English Composition 1	3
10-801-195	Written Communication * OR *	3
10-809-172	Introduction to Diversity Studies	3

SEMESTER 4		15 CREDITS
10-150-126	Premises Cabling Technician	2
10-620-117	Robotics	3
10-620-150	Advanced Programmable Controls	2
10-620-159	Introduction to Frequency & Servo Drives	2
10-801-197	Technical Reporting	3
10-806-143	College Physics 1	3

Emergency Medical Technician/ Advanced Emergency Medical Technician

EMT: 30-531-3 (5 Credits) AEMT: 30-531-6 (4 Credits) • Technical Diploma

Southwest Tech offers initial and continuing education for area emergency medical service providers at various levels including EMR, EMT and AEMT. All courses are based on the State of Wisconsin adopted curriculum with the inclusion of the National Education Standards. Depending on provider level and service requirements Southwest Tech also offers required and supplementary continuing education to maintain and enhance the level of care provided by our community's emergency responders.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

30-531-305	Emergency Medical Technician 1	2
30-531-306	Emergency Medical Technician 2	3
30-531-303	Advanced Emergency Medical Technician (AEMT)	4

This course is not eligible for financial aid.

Golf Course Management

10-325-1 • Associate Degree • 67 Credits

The golf industry is demanding, requiring more multi-disciplined, business minded professionals than ever before. Southwest Wisconsin Technical College's associate degree program exceeds the industry's demands in the most efficient way possible, by providing a focused education and accredited associate's degree in golf course management in only two years.

Our golf course instructor, Scott Kennedy, is one of the most qualified PGA Professionals in the business. His thirty years experience make him an expert in innovative curriculum that focuses on business management, game improvement, modern teaching methods, cutting edge technology, and sound interpersonal skills.

Possible Careers

Opportunities for employment in the golf industry are excellent, with Wisconsin having more golf courses per capita than any other state. Entry-level employment positions may include:

- Golf Course Manager
- Clubhouse Manager
- Golf Course Superintendent
- General Manager
- Head Pro

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

If you enjoy leading people in pursuit of a unified goal, have a passion for the game of golf, and possess enthusiasm for exceptional guest service, then a career in golf course management may be for you.

Students entering this program should:

- Enjoy working with people.
- Have a basic knowledge of the game of golf.
- Demonstrate leadership skills.
- Have good oral and written communication skills.
- Exhibit flexibility and creativity.
- Have good organization skills.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Create and implement a marketing plan
- Plan and administer budgets and buying plans
- Coordinate golf shop/tournament operations with cost analysis
- Deliver quality golf instruction and facility promotions
- Direct turf and equipment management practices with budget oversight
- Oversee food and beverage operations with cost controls
- Use effective communication, math, and human relations skills
- Comply with regulatory and legal issues

Program Basics

- Associate degree, requiring a minimum of two years to complete.
- Day classes.
- Summer internships.
- Financial aid available.
- Classes start in August.
- Transferable to four-year colleges and universities.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		17 CREDITS
10-109-101	Introduction to Tourism *OR*	3
10-325-108	Tournament Promotions	2
10-109-102	Hospitality Professional Development Seminar *OR*	1
10-325-102	Career & Leadership Development	2
10-109-105	Hospitality Law	3
10-109-106	Hospitality Food Sanitation & Safety I	2
10-325-118	Golf Course Irrigation Systems	3
10-325-124	Player Development 1	2
10-801-136	English Composition 1	3

SEMESTER 2		18 CREDITS
10-325-101	Golf Course Operations	3
10-325-103	Pro Shop Management	3
10-325-107	Soils, Conservation, and Fertility	3
10-325-114	Techniques for Teaching Golf	2
10-325-128	Spring Internship: Clubhouse * OR *	
10-325-131	Spring Internship: Maintenance	1
10-801-196	Oral/Interpersonal Communication	3
10-804-107	College Mathematics	3

SEMESTER 3		1 CREDIT
10-325-129	Summer Internship: Clubhouse * OR *	
10-325-132	Summer Internship: Maintenance	1

SEMESTER 4		16 CREDITS
10-109-103	Event Management	3
10-109-108	Hospitality Supervision	3
10-325-104	Club Financial Management	3
10-325-127	Turf Grass Horticulture	3
10-325-130	Fall Internship: Clubhouse * OR *	
10-325-133	Fall Internship: Maintenance	1
10-809-199	Psychology of Human Relations	3

SEMESTER 5		15 CREDITS
10-006-122	Pest Management	1
10-109-104	Hospitality Marketing	3
10-325-109	Integrated Turf Management	3
10-325-110	Golf Course Design and Renovation	2
10-325-113	Golf Course Equipment Repair	3
10-809-172	Introduction to Diversity Studies	3



Graphic & Web Design

10-201-2 • Associate Degree • 66 Credits

Graphic and web designers create a wide variety of materials, including advertisements, displays, packaging, signs, logos, web sites, and web pages to meet the needs and preferences of their various clients for communication and promotion. Graphic and web designers work as in-house designers for a company, as staff designers for a graphic design firm, or as freelance designers. This growing profession needs creative minds that have excellent visualization, computer, and design skills.

Possible Careers

The combination of Web and graphic design curriculum in this degree prepares graduates to work for businesses that require support in both graphic and web design areas as a graphic designer and desktop publisher.

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Have you been told that you have creative and visualization skills? Do you enjoy analyzing design decisions and often think it could have been done better? If you are attracted to the design elements of color, type, shape, illustration, and layout, then creating web sites and print-ready design solutions can be a very satisfying career choice.

Students entering this program should:

- Enjoy working in a computer-based environment using multiple software packages.
- Possess analytical and creative ability.
- Have good oral and written communication skills.
- Understand how to access and document complex information.
- Possess good customer relation skills.
- Be willing to make decisions and solve problems.
- Continuously update graphic and web design knowledge.
- Enjoy organizing, planning and prioritizing work.

Program Outcomes:

At the completion of this program, students are expected to be able to:

- Apply the principles of design to develop strategic marketing and communication products and services
- Demonstrate proficiency in the use of design software, tools and technology
- Implement creative solutions from concept through completion using a formal process
- Apply effective legal and ethical business practices and project management skills
- Communicate artwork rationale in formal and informal settings

Program Basics

- Associate degree, requiring two years or more to complete
- Combination of face to face and online classes
- High school articulation courses accepted
- Financial aid available to students who qualify
- Classes start in August and January
- Modified plan available
- Program articulation with UW-Platteville in progress
- Student laptops are included in this program

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		16 CREDITS
10-201-101	Design Fundamentals	3
10-201-124	Portfolio Introduction	1
10-201-133	Photoshop	3
10-201-134	Illustrator	3
10-801-136	English Composition 1	3
10-804-123	Math with Business Applications * OR *	
10-804-133	Math & Logic	3

SEMESTER 2		18 CREDITS
10-152-116	HTML & CSS	3
10-201-135	InDesign	3
10-201-137	Color Theory	3
10-201-138	Typography	3
10-201-142	Digital Marketing for Graphic Designers	3
10-801-196	Oral/Interpersonal Communication * OR *	
10-801-198	Speech	3

SEMESTER 3		15 CREDITS
10-201-136	Multimedia Concepts	3
10-201-139	Web Page Design 1	3
10-201-143	Beginning WordPress	2
10-201-144	Freelancing for Creatives	1
10-203-131	Introduction to Digital Photography	3
10-809-172	Introduction to Diversity Studies	3

SEMESTER 4		17 CREDITS
10-201-110	Pre-Press Management	3
10-201-128	Internship/Field Study * OR *	
10-201-129	Graphic and Web Design Projects	3
10-201-140	Web Page Design 2	3
10-201-141	Professional Portfolio Assessment	2
10-801-197	Technical Reporting	3
10-809-199	Psychology of Human Relations	3

Health Information Technology

10-530-1 • Online Associate Degree • 60/61 Credits

Health information technology management (HIT), is the practice of acquiring, analyzing, and protecting digital and traditional medical information. The health care industry depends on electronic information systems. As health data becomes more digitized, opportunities are created for trained health information technicians with the skills and knowledge to collect, analyze, monitor, maintain and report health data according to established data quality principles, legal and information security standards and professional best-practice guidelines. The Health Information Technology program will prepare you to become an expert in patient health data management.

Possible Careers

All health care facilities such as: hospitals, clinics, nursing homes, surgery centers, insurance companies, consulting companies, government agencies, computer software companies and other health care settings. Possible employment for program graduates may include:

- Outpatient Coder
- Inpatient Coder
- Medical Coding Specialist
- Coding Analyst
- Claims Analyst
- Patient Care Coordinators
- Patient Registrar
- Benefits Coordinator
- Medical Biller
- Collections Clerk
- Insurance Claims Clerk
- Customer Service Representatives
- HIM Revenue Cycle Auditors
- Document and Coding Specialists
- Coding Specialist
- Health Information Technicians
- Medical Office Administrators
- Clinical Data Analyst
- Compliance Auditors

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Are you interested in the business and technology aspects of healthcare? Are you detail-oriented and enjoy science, management, law, and computers? Health Information Technology may be the career choice for you.

Students entering this program should:

- Be interested in working in health care, but not directly with patients.
- Be interested in business and technology.
- Be detail oriented.
- Have an aptitude for science, but also like management, law, and computers.
- Enjoy working with professionals: physicians, nurses, lawyers, administrators and executives.
- Want a career where you can choose to work on your own, with others, or some of both.
- Have a strong knowledge of medical terminology.
- Employ good critical thinking and communication skills.

Program Outcomes

- Apply data governance principles to ensure the quality of health data
- Apply coding and reimbursement systems
- Model professional behaviors and ethics
- Apply informatics and analytics in data use
- Apply organizational management techniques

Program Basics

- Associate degree.
- All courses offered online allowing for 100% flexibility, with the exception of professional practice experiences (PPEs).
- Financial aid is available to those that qualify.
- August or January program start date.
- Students must achieve a grade of C or better in each course of the program curriculum to be eligible to progress.
- Flexible, sequenced credential training starts with a Medical Coding Specialist Certificate (first year)
- Second year leads to Associate Degree in Health Information Technology Management.
- Credits transferrable for a Bachelor's degree in Health Information Management.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		6/7 CREDITS
10-501-101	Medical Terminology	3
10-806-189	Basic Anatomy * OR *	3
10-806-177	Gen Anatomy & Physiology	4

SEMESTER 2		13 CREDITS
10-501-107	Digital Literacy for Healthcare	2
10-530-162	Foundations of HIM	3
10-530-182	Human Diseases for the Health Professions	3
10-530-197	ICD Diagnosis Coding	3
10-530-199	ICD Procedure Coding	2

SEMESTER 3		14 CREDITS
10-530-159	Health Revenue Management	3
10-530-165	Intermediate Coding	3
10-530-178	Healthcare Law & Ethics	2
10-530-184	CPT Coding	3
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 4		15 CREDITS
10-530-163	Healthcare Stats and Analytics	3
10-530-164	Intro to Health Informatics	3
10-801-195	Written Communication	3
10-804-189	Introductory Statistics	3
10-809-198	Intro to Psychology	3

SEMESTER 5		13 CREDITS
10-530-161	Health Quality Management	3
10-530-166	HIT Capstone	1
10-530-167	Management of HIM Resources	3
10-530-196	Professional Practice	3
10-809-172	Introduction to Diversity Studies	3

Human Services Associate

10-520-3 • Associate Degree • 65 Credits

The Human Services Associate program trains students to provide information, support, care, and advocacy in a human service setting. Students acquire the skills needed to work with individuals, groups, and communities. They learn to work with people of diverse racial, ethnic, and cultural backgrounds. General education courses included in the program teach students to better understand social problems. During the second year of the program, students receive fieldwork placement in a human service setting.

Possible Careers

Graduates from the Human Services Associate program are employed in county human service agencies, community-based organizations, residential treatment programs, schools, inpatient facilities, and other settings that assist people in need. Depending on their area of interest, graduates work with elders, teens, families, people with disabilities, people in the criminal justice system, domestic/family violence, community development, and prevention.

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Do you have an interest in working with people in need, have effective communication and interpersonal skills, and an appreciation of cultural diversity? Human Services may be a rewarding career choice.

Students entering this program should:

- Have a genuine interest to work with people in need.
- Have effective communication and interpersonal skills.
- Be psychologically and emotionally healthy.
- Be able to think critically.
- Be tolerant of different lifestyles, beliefs, and values.
- Be able to maintain confidentiality.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Model a commitment to cultural competence
- Uphold the Ethical Standards and Values for Human Service Professionals
- Demonstrate professionalism
- Utilize community and agency resources
- Apply human services interventions and best practices
- Cultivate professional relationships

Program Basics

- Associate degree, requiring a minimum of two years to complete.
- Students must achieve a "C" grade or better in all courses within the curriculum to be eligible to progress.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
10-520-101	Introduction to Human Services	3
10-520-104	Community Resources and Services	3
10-801-195	Written Communication	3
10-809-172	Introduction to Diversity Studies	3
10-809-188	Developmental Psychology	3

SEMESTER 2		15 CREDITS
10-520-102	Ethics for the Profession	3
10-520-103	Issues In ATODA	3
10-520-105	Interviewing and Counseling Techniques	3
10-801-198	Speech	3
10-809-198	Intro to Psychology	3

SEMESTER 3		19 CREDITS
10-520-106	Issues of Gerontology	3
10-520-108	Methods of Social Casework	3
10-520-109	Professional Documentation in Human Services	3
10-520-121	Field Study I	4
10-809-159	Abnormal Psychology	3
10-809-196	Intro to Sociology	3

SEMESTER 4		16 CREDITS
10-520-107	Disability Studies	3
10-520-112	Children, Youth, & Family	3
10-520-122	Field Study II	4
10-804-123	Math with Business Applications	3
10-809-195	Economics	3

Individualized Technical Studies

Associate Degree • 60-70 Credits

The Individualized Technical Students program allows students to combine courses from two or more major areas of study into an Associate of Applied Science Degree that meets specific career preparation goals not available in other Southwest Tech programs. Students begin by completing a program plan that outlines career objectives, and the courses needed to meet those objectives.

Gainful Employment

Due to the varied nature of the Individualized Technical Studies program, gainful employment information varies from individual to individual.

Is This Program for You?

If you have a career goal in mind and haven't found the right program to help you prepare for it, the Individualized Technical Studies program could be what you're looking for. Check out the Individualized Technical Studies Guide to find out more about the program.

Program Basics:

- Associate degree, requiring two years or more to complete.
- High school articulation courses accepted.
- Financial aid available to those who qualify.
- Classes start in August and January.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

GENERAL STUDIES CORE	21-30 CREDITS
Communications	6
Social Science	3
Behavioral Science	3
Mathematics / Science	3
Additional General Education (from any category above)	6-15
INDIVIDUALIZED TECHNICAL STUDIES CORE	40 CREDITS
Program Emphasis (minimum of 20 credits from one area)	



Industrial Mechanic

31-620-1 • 1-Year Technical Diploma • 34 Credits

The Industrial Mechanic program teaches technical skills in mechanical drive systems, electrical systems, hydraulics and pneumatics, laser alignment, basic welding and machining, and many other in-demand skill sets that employers are looking for. Graduates have the option of seeking employment or enrolling in the two year Electromechanical Technology program.

Graduates of this program also have the option of transferring all the credits to the two-year Electro-Mechanical Technology associate degree program.

Possible Careers

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

If you like to troubleshoot problems, put theory to work hands-on, and have interests in math and mechanical processes, a career in industrial maintenance may be your key to success.

Students entering this program should:

- Have an interest in math and science.
- Enjoy problem solving.
- Think creatively.
- Enjoy working with their hands.
- Have good hand-eye coordination.
- Enjoy working with people.
- Have good communication skills.
- Be detail-oriented.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Set up and operate equipment or systems to ensure reliable performance.
- Install, remove, and relocate equipment and systems as directed.
- Troubleshoot and repair mechanical equipment.
- Research preventative maintenance techniques.
- Perform work safely
- Select and order required parts and materials using parts list, catalogs, and standard books.

Program Basics

- Technical Diploma, requiring a minimum of two semesters to complete.
- Classes are offered, daytime, face to face, and on campus.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in January and August.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		17 CREDITS
10-620-101	DC and AC Fundamentals	5
10-620-121	Mechanics and Materials	4
10-620-123	Construction Electrical Wiring 1	1
10-620-124	Welding for Maintenance	2
10-620-138	Construction Electrical Wiring 2	1
10-620-163	Intro to Mechatronics	1
10-804-113	College Technical Math 1A	3

SEMESTER 2		17 CREDITS
10-449-160	Industrial Safety Practices & Career Development	1
10-620-107	Hydraulics and Pneumatics	3
10-620-148	Intro to Motor Controls	2
10-620-149	Intro to Programmable Controls	2
10-620-162	Manual Machine Shop Fundamentals	3
10-620-164	Intro to Preventative Maintenance	1
10-804-114	College Technical Math 1B	2
10-809-199	Psychology of Human Relations	3

Instrumentation and Controls Technology

10-620-3 • Associate Degree • 64 Credits

Nearly all industries are becoming increasingly reliant on highly specialized, automated, and interconnected systems to increase productivity and quality. Become a part of this challenging and financially rewarding career field by enrolling in the Instrumentation and Controls Technology program at Southwest Tech which is one of only three offered in Wisconsin.

As a student in the Instrumentation and Controls Technology program you will learn how to install, configure, program, troubleshoot, and repair these complex systems. In addition, you will learn to about the instruments that control process variables such as pressure, level, flow, composition, and temperature. Graduates of this program have career opportunities in a variety of industries including energy, food, dairy, and manufacturing.

Possible Careers

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Are you detail orientated and mechanically inclined? Do you love problem solving and enjoy math and science? Do you like working with the latest technology? Answering "Yes" could mean that a challenging and rewarding career awaits you in the Instrumentation & Control field.

Students entering this program should:

- Have an interest in math and science.
- Enjoy problem solving.
- Think creatively.
- Enjoy working with their hands.
- Have good hand-eye coordination.
- Enjoy working with people.
- Have good communication skills.
- Be detail-oriented.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Document Processes and Procedures
- Troubleshoot instrumentation and automation systems and devices
- Field calibrate process instrumentation
- Setup, install, and integrate instrumentation and automation systems and devices
- Configure smart instruments using HART communication protocol
- Some employers will require CPR and/or First Aid.

Related Degrees

- Electro-mechanical Technology
- Industrial Mechanic

Program Basics

- Associate degree
- Classes are offered daytime, face to face, and on campus
- Fall Start
- Financial aid eligible
- Credit for prior learning may be available

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		16 CREDITS
10-620-101	DC and AC Fundamentals	5
10-620-121	Mechanics and Materials	4
10-620-163	Intro to Mechatronics	1
10-801-195	Written Communication * OR *	
10-801-136	English Composition 1	3
10-804-113	College Technical Math 1A	3

SEMESTER 2		15 CREDITS
10-449-160	Industrial Safety Practices & Career Development	1
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-620-107	Hydraulics and Pneumatics	3
10-620-148	Intro to Motor Controls	2
10-620-149	Intro to Programmable Controls	2
10-804-114	College Technical Math 1B	2
10-809-199	Psychology of Human Relations	3

SEMESTER 3		16 CREDITS
10-150-129	Introduction to Networks	2
10-513-188	Manufacturing Practices for Food Industry	1
10-620-151	Process Control Systems	5
10-620-156	Fiber Optic Cabling Technician	1
10-620-157	Fundamentals of Embedded Systems	1
10-801-197	Technical Reporting	3
10-809-172	Introduction to Diversity Studies	3

SEMESTER 4		17 CREDITS
10-150-126	Premises Cabling Technician	2
10-513-184	HACCP Training	2
10-620-117	Robotics	3
10-620-150	Advanced Programmable Controls	2
10-620-154	Advanced Calibration Techniques & Analytics	3
10-620-159	Introduction to Frequency & Servo Drives	2
10-806-143	College Physics 1	3

IT-Cybersecurity and Network Administration

10-151-2 • Associate Degree • 65 Credits

The IT-Cybersecurity and Network Administration program provides students with the skills required to maintain a secure IT system along with the expertise to design, install, and manage the integrity of a computer network infrastructure. Equipment and technology used in this program includes firewalls, intrusion detection and prevention systems, anomaly identification systems, physical server computing, cloud computing, and associated physical security technologies. Students will work with business class systems such as Microsoft, Linux, and Mac OS. Extensive hands-on, real-world, experiences with real equipment are provided to gain the immense knowledge required to accurately configure and secure network systems.

Possible Careers

Graduates are prepared for positions in a wide variety of organizations and businesses. Opportunities for employment exist in accounting firms, banks, schools, hospitals, insurance companies, manufacturing firms, and government agencies as:

- Network and Computer Systems Administrators
- IT Support Specialist
- System Administrator
- Information Security Analyst
- Information Security Engineer
- Network Systems Administrator
- Network Security Technician
- Penetration Testers
- Digital Forensics Analysts

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Students entering the IT-Cybersecurity and Network Administration program should:

- Be a digital native and have a curiosity for technology.
- Have an eye for detail and possess an analytical and creative mind.
- Like to solve problems and be challenged.
- Enjoy working independently and in teams.

Students entering this program should:

- Possess an analytical and creative ability.
- Like to solve problems and be persistent.
- Be able to think logically.
- Have good basic reading and math skills.
- Have good oral and written communication skills.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Identify security strategies
- Implement secure infrastructures
- Conduct security testing
- Analyze security data
- Mitigate risk
- Develop security documentation

Program Basics

- Associate degree, requiring a minimum of two years to complete.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in August and January.
- Modified plan available.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		16 CREDITS
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-150-129	Introduction to Networks	2
10-150-134	Windows Support	1
10-151-101	Introduction to Security	1
10-154-110	Hardware/Software Fundamentals	3
10-620-156	Fiber Optic Cabling Technician	1
10-801-136	English Composition 1	3
10-804-133	Math & Logic	3

SEMESTER 2		17 CREDITS
10-107-192	IT Career Development	2
10-150-126	Premises Cabling Technician	2
10-150-135	Windows Server Administration (2 cr)	2
10-151-102	Cybersecurity Essentials	2
10-151-103	Cisco Networking and Security	3
10-151-104	Linux Administration and Security	3
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 3		17 CREDITS
10-150-121	VMWare VCP Essentials	3
10-150-132	Voice Over IP Administration	2
10-150-154	Firewall/VPN Technologies	2
10-151-105	Wireless Networking and Security	2
10-151-106	Scripting for Security	2
10-151-107	Cybersecurity Operations	3
10-809-195	Economics	3

SEMESTER 4		15 CREDITS
10-150-136	Cloud Computing	2
10-151-108	Database Security Administration	3
10-151-109	Advanced Security Capstone	3
10-151-110	Network Defense & Forensics	3
10-151-111	Offensive Security Operations	1
10-809-199	Psychology of Human Relations	3



IT-Network Systems Technician

31-150-9 • Technical Diploma • 33 Credits

The IT-Network Systems Technician program provides students with the skills required to support the integrity of a computer network infrastructure. Students will be able to manage, configure and troubleshoot common system infrastructure issues, including network switching, routing, IP services, fiber optics, premises cabling and basic network device security. Students will work with business class systems such as Cisco, Microsoft and Linux. Extensive hands-on, real-world, experiences with real equipment are provided to gain the immense knowledge required to accurately configure and secure network systems.

Possible Careers

Career opportunities exist in all areas of the country. Graduates with this one-year technical diploma are trained on the major objectives covered by the CompTIA A+ certification which is an industry-recognized credential. Graduates are able to provide hardware and software technology support for any business.

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Students entering this program should:

- Be a digital native and have a curiosity for technology.
- Have an eye for detail and possess an analytical and creative mind.
- Like to solve problems and be challenged.
- Enjoy working independently and in teams.

Helpful Academic Background

- Oral and written communication skills
- Keyboarding
- Computer applications and concepts

Program Outcomes

At the completion of this program, students are expected to be able to:

- Provide entry level end user support
- Manage operating systems and application software
- Support information technology hardware
- Provide basic network support for existing network installations

Program Basics

- One-year technical diploma.
- In person and online classes.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in August.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		16 CREDITS
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-150-129	Introduction to Networks	2
10-150-134	Windows Support	1
10-151-101	Introduction to Security	1
10-154-110	Hardware/Software Fundamentals	3
10-620-156	Fiber Optic Cabling Technician	1
10-801-136	English Composition 1	3
10-804-133	Math & Logic	3

SEMESTER 2		17 CREDITS
10-107-192	IT Career Development	2
10-150-126	Premises Cabling Technician	2
10-150-135	Windows Server Administration (2 cr)	2
10-151-102	Cybersecurity Essentials	2
10-151-103	Cisco Networking and Security	3
10-151-104	Linux Administration and Security	3
10-801-196	Oral/Interpersonal Communication	3

Laboratory Science Technician

30-513-3 • Technical Diploma • 16 Credits

The Laboratory Science Technician program is being offered at the Richland Center High School. For more information, please contact your guidance counselor or our Career Prep Coordinator, Mary Johannesen by emailing mjohannesen@swtc.edu.

Making sure the food we eat is safe is just one of the responsibilities of a laboratory food quality technician. Learn how to:

- Conduct food quality and safety tests
- Report results
- Evaluate the environment's effect on food quality
- Apply quality principles to food production
- Be involved in research and development of new products

Southwest Tech's Laboratory Science Technician program is a one-term technical diploma with a four-week internship that will ensure you are workplace ready!

This program is offered in a convenient format. Most of your coursework will be completed online with twice-weekly face-to-face laboratory sessions. In addition, with successful completion of coursework you will graduate with a Hazard Analysis Critical Control Point (HACCP) certificate.

Possible Careers

Work in research, industrial, environmental, and food science lab settings.

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Successful lab technicians enjoy working in a fast-paced environment that uses hands-on lab skills in a team setting and are focused on quality and organization.

Students entering this program should:

- Have good reading skills, basic math skills, and good verbal communication skills
- Be Employable
- Desire to work with people
- Desire to work as a team member

Program Outcomes

At the completion of this program, students are expected to be able to:

- Collect, process, and preserve lab samples.
- Perform and report laboratory tests in a variety of laboratory settings.
- Identify pre-analytical, analytical, and post-analytical variables that affect procedures, instruments and results, and take appropriate corrective action.
- Perform mathematical functions as required by laboratory procedures.
- Perform and monitor quality assurance and quality control techniques.
- Practice laboratory safety and regulatory compliance.
- Perform information processing functions in the laboratory.
- Apply laboratory results and communicate variables.
- Communicate with colleagues in a professional manner.
- Model professional behaviors, ethics, and appearance.

Program Basics

- One Semester technical diploma
- This program includes classroom and laboratory learning activities, followed by an externship in the food industry
- Courses are a blend of online classes and face to face lab session learning
- The externship hours are based upon the facility hours as assigned
- Must earn at least a grade of C in core classroom/laboratory learning settings to be eligible to work under the direct supervision of a mentor in a four-week externship

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		8 CREDITS
10-513-110	Basic Lab Skills	1
10-513-113	QA Lab Math	1
10-513-188	Manufacturing Practices for Food Industry	1
10-806-109	Fundamentals of Chemistry	2
31-513-181	Quality Lab Microbiology 1	2
31-513-182	Quality Lab Skills 1	1

SEMESTER 2		6 CREDITS
10-103-106	Beginning Microsoft Excel	1
10-513-184	HACCP Training	2
31-513-185	Quality Lab Skills 2	1
31-513-186	Quality Lab Microbiology 2	2

SEMESTER 3		2 CREDITS
10-513-187	Lab Science Practicum	2

Leadership Development

10-196-1 • Online Associate Degree • 60 Credits

This program is 100% online.

The Leadership Development online degree program is designed to meet the needs of working adults. The program provides leadership development training and education for individuals currently employed in supervisory positions or those who wish to prepare themselves for such a position.

- Earn prior learning credit for documented work experience.
- Select courses that fit your schedule and your lifestyle.
- Meet with an advisor to plan your individualized course schedule.

Possible Careers

- Supervisor
- Manager
- Production Manager
- Human Resources Manager

Is This Program for You?

Are you currently employed, with an interest in moving into a supervisory position? Do you enjoy coaching and working with people, both individually and in teams? Do you possess good communication skills and enjoy problem solving? Leadership Development may be a great fit for you.

Students entering this program should:

- Enjoy coaching and working with people both individually and in teams
- Possess good communication skills
- Enjoy solving problems

Program Outcomes

At the completion of this program, students are expected to be able to:

- Utilize quality strategies and tactics
- Apply effective leadership skills
- Apply Human Resource policies and procedures
- Perform leadership development functions to achieve organizational objectives

Program Basics

The online Leadership Development program is designed specifically for individuals who work full-time with a minimum amount of discretionary time available to pursue educational goals. This allows you to learn at a faster pace to earn your degree faster.

- Associate degree, requiring a minimum of two years to complete.
- Students select the number of courses to complete within that timeframe.
- Courses rotate on a set schedule so students know when a course will be offered.
- The student becomes an active partner with the instructor and other learners in a collaborative, online learning experience.
- Concepts introduced in courses are applied in the workplace.
- General education courses are delivered completely online in either eight, twelve or sixteen week sessions.
- Prior learning credit is available for documented work experience.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		12 CREDITS
10-102-105	Introduction to Business	3
10-196-208	Personal Leadership	3
10-196-209	Team Building and Problem Solving	3
10-809-172	Introduction to Diversity Studies	3

SEMESTER 2		6 CREDITS
10-196-210	Legal Issues for Supervisors	3
10-809-195	Economics	3

SEMESTER 3		13 CREDITS
10-102-130	Management Principles	3
10-103-106	Beginning Microsoft Excel	1
10-196-119	Managerial Budgeting and Finance	3
10-196-211	Workplace Innovations	3
10-196-214	Leading Strategically	3

SEMESTER 4		12 CREDITS
10-102-129	Human Resources Management	3
10-623-110	Lean Concepts	3
10-801-196	Oral/Interpersonal Communication	3
10-804-123	Math with Business Applications	3

SEMESTER 5		6 CREDITS
10-196-213	Workplace Safety	3
10-801-195	Written Communication	3

SEMESTER 6		11 CREDITS
10-196-212	Training and Talent Development	3
10-196-215	Project Management Fundamentals	3
10-196-216	Leading Change	3
10-196-217	Leadership Development Career Experience	2

Medical Assistant

31-509-1 • 1-Year Technical Diploma • 29 Credits

Medical assistants serve an important role on the medical team by performing a wide variety of clinical and clerical duties. The Medical Assistant program is designed to orient students to the duties of a physician's office employee, from general office procedures to the technical phases of exam room assisting, and elementary medical laboratory techniques. Occupational experience is provided through placement in a local office/clinic during the last four weeks of the final semester, and graduates are eligible to sit for the national certification examination immediately after graduation.

The Southwest Wisconsin Technical College Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Curriculum Review Board of the Association of Medical Assistants Endowment (AAMAE).

Possible Careers

- **Medical Assistant:** Prepares a patient for examination or treatment, takes vital signs, sterilizes instruments, performs simple lab tests, performs electrocardiograms, and assists the physician as needed.
- **Claims Analyst:** Processes insurance claims on a computer.
- **EKG Technician:** Operates and maintains electrocardiographic machines, records the heart's electrical activity, and provides data for diagnosis and treatment of heart ailments by physicians.
- **Laboratory Assistant:** Performs simple laboratory procedures and venipunctures to collect blood specimens.
- **Medical Records Clerk:** Handles all patient medical records in areas such as progress notes and pulls records of patients on a daily basis.
- **Medical Office Assistant:** Performs a variety of duties such as bookkeeping, typing, filing, record keeping, customer relations, telephoning, general correspondence, appointments, and patient accounts.
- **Phlebotomist:** Draws blood samples from patients for lab tests and blood donations. Performs related duties involving patient care and specimen processing with strict adherence to safety procedures to prevent transmission of infectious diseases.

With additional education and/or work experience, graduates may find other opportunities for employment, including:

- Medical Office Manager
- Medical Transcriptionist
- Insurance Coding Specialist

Is This Program for You?

If you are interested in a health care career and think you would enjoy the variety of administrative, laboratory, and patient care areas of a physician's office or clinic, a Medical Assistant career will be an excellent choice for you.

Students entering this program should:

- Show commitment to the patient.
- Enjoy teamwork.
- Deal effectively with stressful, fast paced work.
- Possess effective listening skills.
- Communicate well with others through oral and written means.
- Have good mental dexterity.
- Demonstrate attention to detail.

Program Basics

- Technical diploma, requiring a minimum of one year to complete.
- Day classes.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in August.
- Modified part-time curriculum available in 4-semester plan.
- Students scoring less than 11th grade level in three or more TABE subtests must enroll under a modified program.
- Students must achieve a "C" grade or better (78%) in each course of the program curriculum to be eligible to progress.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
31-501-101	Medical Terminology	2
31-501-104	Contemporary Healthcare Practices	2
31-509-301	Medical Asst Admin Procedures	2
31-509-302	Human Body in Health & Disease	3
31-509-303	Medical Asst Lab Procedures I	2
31-509-304	Medical Asst Clin Procedures I	4
SEMESTER 2		14 CREDITS
31-509-305	Medical Asst Lab Procedures 2	2
31-509-306	Medical Asst Clin Procedures 2	3
31-509-307	Med Office Insurance & Finance	2
31-509-308	Pharm for Allied Health	2
31-509-309	Medical Law, Ethics & Profess	2
31-509-310	Medical Assistant Practicum	3

Program Outcomes

At the completion of this program, students are expected to be able to:

- Perform medical office administrative functions
- Provide patient care in accordance with regulations, policies, laws, and patient rights
- Perform medical laboratory procedures
- Demonstrate professionalism in a healthcare setting
- Demonstrate safety and emergency practices in a healthcare setting

Medical Coding Specialist

31-530-2 • 1-Year Technical Diploma • 33/34 Credits

This program is 100% online.

The Medical Coding Specialist program prepares students for employment as entry-level coding specialists in health care facilities such as hospitals, clinics, physician practice groups, surgery centers, long-term care facilities, and home health care agencies. This program teaches students to review medical documentation provided by physicians and other health care providers, and translate it into universally recognized numeric codes.

Possible Careers

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Job security is available nationwide: there is a critical shortage of qualified medical coders. This program prepares students for employment as entry-level coding specialists in health care facilities such as: hospitals, clinics, nursing homes, surgery centers, insurance companies, consulting companies, government agencies, computer software companies and other health care settings. Possible employment for program graduates may include:

- Outpatient Coder
- Inpatient Coder
- Medical Coding Specialist
- Coding Analyst
- Claims Analyst

Students entering this program should:

- be able to work independently.
- have a strong knowledge of medical terminology.
- employ good critical thinking and communication skills.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Collect health data
- Model professional behaviors and ethics
- Use electronic applications to support coding and data collection
- Apply coding and reimbursement systems

Program Basics

- Technical Diploma.
- May take the program in modified plan.
- All courses offered online.
- Medical Coding students must achieve a grade of C or better in each course of the program curriculum to be eligible to progress.
- Financial aid available.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		6/7 CREDITS
10-501-101	Medical Terminology	3
10-806-189	Basic Anatomy * OR *	3
10-806-177	Gen Anatomy & Physiology	4

SEMESTER 2		13 CREDITS
10-501-107	Digital Literacy for Healthcare	2
10-530-162	Foundations of HIM	3
10-530-182	Human Disease for Hlth Profes	3
10-530-197	ICD Diagnosis Coding	3
10-530-199	ICD Procedure Coding	2

SEMESTER 3		14 CREDITS
10-530-159	Health Revenue Management	3
10-530-165	Intermediate Coding	3
10-530-178	Healthcare Law & Ethics	2
10-530-184	CPT Coding	3
10-801-196	Oral/Interpersonal Communication	3

Medical Laboratory Technician

10-513-1 • Associate Degree • 64 Credits

Learn to perform routine clinical laboratory tests such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, molecular and other emerging diagnostics. They develop communication skills, as this career requires frequent interactions with members of the healthcare team, external relations, customer service, and patient education. A combination of fundamental laboratory techniques and clinical experience prepares graduates for work in laboratories serving the health care sector. Graduates are prepared to complete the ASCP Board of Certification to become certified Medical Laboratory Technicians.

Graduates are prepared to complete the ASCP Board of Certification to become certified MLT.

Possible Careers

- Medical Laboratory Technician - Performs routine laboratory tests on blood, urine, and body fluids to help in the diagnosis and treatment of disease and injury in hospitals, clinical laboratories, and reference laboratories.
- Laboratory Technician/Research Assistant - Performs routine and special laboratory tests in research, industrial, environmental and food science laboratory settings.

With additional training and/or work experience, graduates may find employment as:

- Clinical Laboratory Scientist (Medical Technologist)
- Medical Microbiologist
- Laboratory Computer Sales or Training Specialist
- Laboratory Sales/Product Representative
- Instrument Service Technician
- Quality Control Officer
- Biomedical Instrument Specialist
- Clinical Research Associate
- Safety Officer
- Laboratory Science Instructor/Trainer

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Are you analytical, accurate, and interested in science, technology, and health care? The Medical Lab Tech program may be a good fit for you.

Students entering this program should:

- Have good reading, math, and comprehension skills.
- Be in good physical and emotional health.
- Be flexible, adaptable, and enjoy working with people.
- Be self-confident, independent, and a self-directed learner.
- Meet Wisconsin Caregiver Law requirements.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Practice laboratory safety and regulatory compliance
- Collect and process biological specimens
- Monitor and evaluate quality control in the laboratory
- Apply modern clinical methodologies including problem solving and troubleshooting according to predetermined criteria
- Correlate laboratory results to diagnosis of clinical conditions and/or diseases
- Perform information processing in the clinical laboratory
- Model professional behaviors, communication, ethics, and appearance

Program Basics

- Associate degree, requiring a minimum of two years to complete.
- Financial aid is available to those that qualify.
- August program start date; however, some classes will be available in January.
- Qualified students may take some courses immediately upon program acceptance.
- Students must achieve a grade of a C or better in each course of the program curriculum to be eligible to progress.
- Current Healthcare Provider CPR certification must be maintained throughout the clinical experience portion of the MLT Program.
- Sign off as qualified in Essential Functional Abilities after acceptance to the program and prior to clinical placement.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		17 CREDITS
10-513-110	Basic Lab Skills	1
10-513-111	Phlebotomy	2
10-513-113	QA Lab Math	1
10-513-115	Basic Immunology Concepts	2
10-801-195	Written Communication	3
10-806-177	Gen Anatomy & Physiology	4
10-806-186	Intro to Biochemistry	4

SEMESTER 2		17 CREDITS
10-513-109	Blood Bank	4
10-513-114	Urinalysis	2
10-513-120	Basic Hematology	3
10-513-121	Coagulation	1
10-801-196	Oral/Interpersonal Communication	3
10-806-197	Microbiology	4

SEMESTER 3		6 CREDITS
10-809-172	Introduction to Diversity Studies * OR *	
10-809-196	Intro to Sociology	3
10-809-188	Developmental Psychology * OR *	
10-809-198	Intro to Psychology	3

SEMESTER 4		11 CREDITS
10-513-116	Clinical Chemistry	4
10-513-130	Advanced Hematology	2
10-513-133	Clinical Microbiology	4
10-513-180	Body Fluids Analysis	1

SEMESTER 5		13 CREDITS
10-513-140	Advanced Microbiology	2
10-513-141	Pre-Clinical Experience	2
10-513-151	Clinical Experience 1	3
10-513-152	Clinical Experience 2	4
10-513-170	Introduction to Molecular Diagnostics	2

Midwife (Direct Entry)

10-510-6 • Associate Degree • 68 Credits

Direct Entry Midwife is a two-year associate degree program that will train professional midwives who will qualify for certification and licensure in Wisconsin. Graduates of Direct Entry Midwife will provide hands-on holistic care for women of childbearing years and partner with women and other collaborative healthcare partners throughout the childbearing process.

This program emphasizes assessment in the low-risk pregnancy. A midwife conducts an initial assessment during pregnancy which includes nutritional assessment, overall health, risk level of the pregnancy, and then contracts and partners with the mother during the pregnancy to monitor fetal growth and development, overall health of the mother, and family support and resources available. The midwife will then assist the mother in labor and birth of the child in home or birthing center settings. The midwife follows the birth of the child with instruction on lactation technique, initial care of newborn and assessment of family support as mother and child transition in the out of hospital setting.

This program is accredited by the [Midwifery Education Accreditation Council \(MEAC\)](#).

Possible Careers

Graduates may provide care in clinics, private homes, and birthing centers. Midwives can work in both rural and urban settings. The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Do you have a committed interest in the Midwifery Model of Care? Are you tolerant of different lifestyles, values, beliefs, and cultures? Are you a self-confident, independent, and self-directed learner? You may find a career in Midwifery rewarding.

Students entering this program should:

- Be tolerant of different lifestyles, values, beliefs, and cultures.
- Be able to maintain confidentiality.
- Have a committed interest in pre-natal and well women care using the Midwifery Model of Care.
- Have effective communication and interpersonal skills.
- Be able to perform delegated tasks.
- Be able to effectively delegate to others.
- Have efficient writing skills.
- Have good reading and comprehension skills.
- Be in good physical and emotional health.
- Be flexible, adaptable, and enjoy working with people.
- Be self-confident, independent, and a self-directed learner.
- Meet Wisconsin Caregiver Law requirements.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Acquire a foundation of theoretical knowledge, clinical assessment, critical thinking skills, and shared decision making
- Create the plan of care for the woman in the childbearing year
- Demonstrate holistic, competent care for women and families during the childbearing year

Program Basics

- Associate degree, requiring a minimum of two years to complete
- Some online classes available
- Financial aid available to students who qualify
- May take some courses immediately upon program acceptance
- Students must achieve a C or better in each course of the program curriculum to be eligible to progress
- Bridge track available for the already Certified Professional Midwife (CPM)
- Virtual access available for students who do not reside locally
- Program has a January start
- Completion of all Midwife program clinical work needs to be accomplished within 5 years of original program registration

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		15 CREDITS
10-501-153	Body Structure and Function	3
10-510-155	Introduction to Midwifery Practice	2
10-510-156	Midwife Science Lab	1
10-510-157	Physical Exam for the Midwife	2
10-510-158	Introduction to Midwife Clinic	1
10-801-195	Written Communication	3
10-809-198	Intro to Psychology * OR *	
10-809-199	Psychology of Human Relations	3

SEMESTER 2		7 CREDITS
10-510-159	Midwife Clinic 1	1
10-801-196	Oral/Interpersonal Communication	3
10-809-172	Introduction to Diversity Studies	3

SEMESTER 3		15 CREDITS
10-510-140	Nutrition	3
10-510-153	Applied Pharmacology	2
10-510-160	Antepartum Theory	4
10-510-161	Antepartum Lab	1
10-510-162	Midwife Clinic 2	2
10-809-128	Marriage & Family	3

SEMESTER 4		13 CREDITS
10-510-148	Midwife Clinic lab I	1
10-510-150	OB/Medication Management	1
10-510-163	Midwife Clinic 3	1
10-510-164	Intrapartum	3
10-510-165	Postpartum	1
10-510-166	Neonate	1
10-510-167	Midwife Clinic 4	2
10-804-123	Math with Business Applications	3

SEMESTER 5		4 CREDITS
10-510-168	Midwife Clinic 5	2
10-510-169	Midwife Clinic 6	2

SEMESTER 6		14 CREDITS
10-510-146	Well Woman Gynecology	3
10-510-149	Professional Issues in Midwifery	2
10-510-152	Midwife Clinic Lab II	2
10-510-154	Midwife Research	1
10-510-170	Midwife Clinic 7	3
10-809-166	Intro to Ethics: Theory & App	3

Nonprofit Leadership

10-196-6 • Associate Degree • 60 Credits

This program is 100% online.

The Nonprofit Leadership online program is designed to meet the needs of working adults. In many communities, nonprofit organizations exist to meet an unmet needs, delivering essential services to individuals, families and neighborhoods. These organizations and their staff play a critical role in building strong communities while also creating meaningful social change. SWTC's Non-Profit Leadership Program provides students with the skills and experiences to equip them for careers with social service organizations hospitals and clinics, foundations, government agencies—including emergency services, health and human services, and educational institutions—and other organizations providing direct services to residents and communities.

Students in the Nonprofit Leadership Program study non-profit strategic planning, management principles, board relations, non-profit branding and marketing, and fundraising. Courses in this program emphasize “learning by doing,” ensuring that students graduate with practical, marketable skills that can be applied in a variety of non-profit and government career fields.

Is This Program for You?

If you are interested in community service, are a task-driven self-starter, enjoy teamwork, and are drawn to jobs and activities that allow you to give back to others while creating meaningful change, the Non-Profit Leadership program may be a good fit for you.

Students entering this program should:

- Interest in serving your community
- Enjoy working with people from a variety of backgrounds and experiences
- Approach their work with a high degree of integrity
- Be able to make decisions
- Be able to communicate clearly

Program Outcomes

At the completion of this program, students are expected to be able to:

- Examine current trends in nonprofits
- Assess organizational goals and missions
- Develop organizational strategic plans
- Cultivate strategic partnerships across government, community and nonprofit sectors
- Create fundraising strategies and assess financial strength of nonprofit organizations
- Manage healthy and professional employee, board and volunteer relations

Program Basics

The online Nonprofit Leadership program is designed specifically for individuals who work full-time with a minimum amount of discretionary time available to pursue educational goals. This allows you to learn at a faster pace to earn your degree faster.

- Associate degree, requiring a minimum of two years to complete.
- Classes are offered 100% online
- High school articulation courses accepted
- Financial aid available

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		12 CREDITS
10-196-300	Foundations and Non-profits	3
10-196-301	Current Trends in Non-profits	3
10-196-302	Non-profit Strategic Planning	3
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 2		6 CREDITS
10-809-166	Ethics: Theory & App	3
10-809-195	Economics	3

SEMESTER 3		12 CREDITS
10-102-130	Management Principles	3
10-196-303	Non-profit Leadership	3
10-196-305	Meeting and Event Planning	3
10-196-311	Nonprofit Financial Tools for Decisions	3

SEMESTER 4		12 CREDITS
10-102-129	Human Resources Management	3
10-196-304	Board Relations and Volunteer Management	3
10-196-306	Non-profit Branding and Marketing	3
10-804-123	Math with Business Applications	3

SEMESTER 5		6 CREDITS
10-196-307	Non-profit Revenue Generation 1	3
10-801-195	Written Communication	3

SEMESTER 6		12 CREDITS
10-196-216	Leading Change	3
10-196-308	Community & Social Services in Nonprofits	3
10-196-309	Non-profit Revenue Generation 2	3
10-196-310	Non-profit Leadership Career Experience	3

Nursing Assistant

30-543-1 • Certificate • 2 Credits

Nursing Assistants play an important role in basic patient/resident care activities in hospitals, nursing homes, and other health care settings, including home health care. The Nursing Assistant course meets state and federal requirements for training and testing, and is open to individuals 16 years of age or older. The course also serves as one prerequisite for individuals applying for the Nursing-Associate Degree program.

The Southwest Tech Nursing Assistant Program is approved by the Wisconsin Department of Health and Family Services, preparing the student to be successful in meeting state and federally regulated competencies as a nursing assistant. The graduating student is eligible to take the National Nurse Aid Assessment Program Exam, which includes both a written and skills exam.

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Possible Careers

There are many job openings for nursing assistants in Southwest Wisconsin as well as throughout the state. The nursing assistant performs basic nursing tasks under the supervision and direction of the registered nurse. Employment is found in nursing homes, hospitals and home health agencies. The Southwest Wisconsin Technical College Nursing Assistant Certificate is recognized by employing agencies in Southwest Wisconsin as excellent training for employment.

Is This Program for You?

If you are a good communicator, compassionate, and interested in caring for people, becoming a nursing assistant may be a rewarding career choice for you.

Students entering this program should:

- Have good reading skills.
- Be able to do physically taxing work.
- Be flexible and function as a nursing team member.
- Be willing to work with people who are ill and older adults.
- Be at least 16 years old by the time of program completion.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Communicate and interact effectively with clients, family and co-workers
- Maintain and protect client rights
- Report information and record observations
- Demonstrate the ethical and legal responsibilities of the NA/HHA
- Provide safe care to a diverse population, meeting personal, physical and psychosocial client needs
- Assist with client rehabilitation and restorative care, promoting independence
- Assist clients with long-term, disabling conditions including dementia, always focusing on the strengths of the client
- Work cooperatively in a team environment
- Eligible to take the WI NA Competency evaluation

Program Basics

- Certificate as a Basic Nursing Assistant after 81 hours of training.
- Nursing home clinical component only.
- Classes offered on part-time basis fall and spring.
- Classes offered full-time on campus in summer.
- Qualified in functional abilities for Nursing Assistant program.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1	2 CREDITS
30-543-300 Nursing Assistant	2

This course is not eligible for financial aid.

Nursing-Associate Degree

10-543-1 • Associate Degree • 70 Credits

The Associate Degree Nursing program prepares students with the knowledge and skills needed to work successfully as registered nurses (RN) and function with judgment and technical competence when providing care for patients. The program offers classroom discussion, independent learning projects, labs, and hands-on clinical experiences in area healthcare agencies. Our well-rounded curriculum features state-of-the-art technology, including adult, pediatric, and obstetric simulators. Students are eligible to take the licensing exam (NCLEX-RN) for Registered Nurses after completion of all 70 credits in the program.

This program is accredited by the [Accreditation Commission for Education in Nursing \(ACEN\)](#).

Possible Careers

Opportunities include working in:

- Hospitals
- Physicians' clinics
- Nursing homes
- Extended care facilities
- Home health care
- Wellness centers
- Hospice

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Nurses must work well under pressure, and they typically enjoy math, science, communications, and problem solving. If you are independent, compassionate, and are committed to helping people, you may find nursing to be very rewarding.

Students entering this program should:

- Have good reading and comprehension skills.
- Be in good physical and emotional health.
- Be flexible, adaptable, and enjoy working with people.
- Be self-confident, independent, and a self-directed learner.
- Meet Wisconsin Caregiver Law requirements.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Integrate professional nursing identity reflecting integrity, responsibility, and nursing
- Communicate comprehensive information using multiple sources in nursing practice
- Integrate theoretical knowledge to support decision making
- Integrate the nursing process into patient care across diverse populations
- Function as a healthcare team member to provide safe and effective care

Program Basics

- Day, evening/weekend and online classes available.
- Financial aid available to those that qualify.
- August and January program start dates.
- May take some courses immediately upon program acceptance.
- Students must achieve a grade of a C or better in each course of the program curriculum to be eligible to progress.
- Current Healthcare Provider CPR certification must be maintained throughout the program. (Courses must include CPR, and a hands-on exam must be taken.)
- Sign off as qualified in Functional Abilities for Nursing after acceptance to the program and prior to first clinical.
- Elective credits must be Associate Degree level courses and cannot be Fundamentals of Chemistry or Nursing Assistant.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		19 CREDITS
10-543-101	Nursing Fundamentals	2
10-543-102	Nursing Skills	3
10-543-103	Nursing Pharmacology	2
10-543-104	Nursing Intro Clinical Practice	2
10-801-195	Written Communication	3
10-806-177	Gen Anatomy & Physiology	4
10-809-188	Developmental Psychology	3

SEMESTER 2		17 CREDITS
10-543-105	Nursing Health Alterations	3
10-543-106	Nursing Health Promotion	3
10-543-107	Nursing Clinical Care Across the Lifespan	2
10-543-108	Intro to Clinical Care Management	2
10-801-196	Oral/Interpersonal Communication	3
10-806-179	Adv Anatomy & Physiology	4

SEMESTER 3		18 CREDITS
10-543-109	Nursing Complex Health Alterations I	3
10-543-110	Mental Health & Community Concepts	2
10-543-111	Nursing Intermediate Clinical Practice	3
10-543-112	Nursing Advanced Skills	1
10-806-197	Microbiology	4
10-809-198	Intro to Psychology	3
Elective	Elective 03	2

SEMESTER 4		16 CREDITS
10-543-113	Nursing Complex Health Alterations II	3
10-543-114	Nursing Management & Professional Concepts	2
10-543-115	Nursing Advanced Clinical Practice	3
10-543-116	Nursing Clinical Transition	2
10-809-196	Intro to Sociology * OR *	
10-809-197	Contemporary Amer Society	3
Elective	Elective 04	3

Physical Therapist Assistant

10-524-1 • Associate Degree • 64 Credits

Physical therapist assistants work under the supervision of a physical therapist. Their duties include: assisting the physical therapist with treatment programs according to the plan of care; training patients in exercises and activities of daily living; conducting treatments; using special equipment; administering modalities and other treatment procedures; and reporting to the physical therapist about the patient's responses.

The Physical Therapist Assistant Program at Southwest Wisconsin Technical College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, Virginia 22314; telephone: 703.706.3245; email: accreditation@apta.org; website: www.capteonline.org. If needing to contact the program/institution directly, please call 608.822.2653 or email splace@swtc.edu.

Possible Careers

Employment opportunities for Physical Therapist Assistant include:

- Hospitals
- Rehabilitation Centers
- Outpatient Clinics
- Sports Medicine Centers
- Skilled Nursing and Long-Term Care Facilities
- Schools
- Specialty Units
- Home Health Agencies

Is This Program for You?

Do you have an interest in helping others and enjoy working with people from a variety of backgrounds and abilities? Do you enjoy working independently, and are you in good physical and emotional health? If so, the Physical Therapist Assistant program may provide the opportunity you need to launch a great career.

Students entering this program should:

- Have good reading, math, and comprehension skills.
- Be in good physical and emotional health.
- Be flexible, adaptable, and enjoy working with people.
- Be self-confident, independent, and a self-directed learner.
- Meet Wisconsin Caregiver Law requirements.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Demonstrate clear and collaborative communication with patients, families, and health care team.
- Exhibit behaviors and conduct that reflect respect and sensitivity according to physical therapy practice standards.
- Function under the supervision of a physical therapist in a safe, legal, ethical manner to ensure the safety of patients, self, and others throughout the clinical interaction.
- Produce documentation to support the delivery of physical therapy services.
- Demonstrate critical thinking skills to implement and modify treatment within a plan of care under the direction and supervision of a physical therapist.
- Perform data collection essential for carrying out the plan of care under the direction and supervision of the physical therapist.
- Perform technically competent, evidence-based physical therapy interventions under the direction and supervision of the physical therapist.
- Educate patients, families and other health care providers.
- Integrate components of operational and fiscal practices of physical therapy service in a variety of settings.
- Implement a self-directed plan for career development, credentialing and lifelong learning.

Program Basics

- Associate degree
- Day, evening/weekend and online classes may be available.
- Financial aid is available to those that qualify.
- August program start date; however, some classes will be available in January.
- Qualified students may take some courses immediately upon program acceptance.
- Students must achieve a grade of a C or better in each course of the program curriculum to be eligible to progress.
- Current Healthcare Provider CPR certification must be maintained throughout the program. (Courses must include CPR, and a hands-on exam must be taken.)

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

PREREQUISITES TO		4 CREDITS
PROGRAM CORE COURSES		
10-806-177	Gen Anatomy & Physiology	4

SEMESTER 1		16 CREDITS
10-524-139	PTA Patient Interventions	4
10-524-140	PTA Professional Issues 1	2
10-524-156	PTA Applied Kinesiology 1	4
10-801-195	Written Communication	3
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 2		13 CREDITS
10-524-142	PTA Therapeutic Exercise	3
10-524-143	PTA Biophysical Agents	4
10-524-157	PTA Applied Kinesiology 2	3
10-809-188	Developmental Psychology	3

SEMESTER 3		16 CREDITS
10-524-144	PTA Princ of Neuro Rehab	4
10-524-145	PTA Princ of Musculo Rehab	4
10-524-146	PTA Cardio & Integ Mgmt	3
10-524-147	PTA Clinical Practice 1	2
10-809-198	Intro to Psychology * OR *	
10-809-199	Psychology of Human Relations	3

SEMESTER 4		15 CREDITS
10-524-148	PTA Clinical Practice 2	3
10-524-149	PTA Rehab Across the Lifespan	2
10-524-150	PTA Professional Issues 2	2
10-524-151	PTA Clinical Practice 3	5
10-809-172	Introduction to Diversity Studies	3

Supply Chain Assistant

31-182-1 • 1-Year Technical Diploma • 32 Credits

This program is 100% online.

Students can take as little as one year to complete this online Supply Chain Assistant Technical Diploma, which provides concentrated learning by focusing on occupational areas. Students learn about supply chain management and how it relates to purchasing, inventory management, logistics, negotiations, global supply chain management, enterprise resource planning, lean, and service operations.

Graduates in this fast-paced, growing field can make a positive impact on an organization by increasing profitability and efficiency through skills developed in this program.

Possible Careers

Many careers and job titles exist in supply chain management such as purchasing associate, material coordinator, production assistant, receiving lead, recycling specialist, cargo agent, and freight broker, among others.

With additional education and/or work experience, Supply Chain Assistant program graduates may have additional opportunities in roles such as shipping supervisor, buyer, materials planner, production scheduler, manufacturing supervisor, team leader, and transportation dispatcher, among others.

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Is This Program for You?

Are you interested in business and how different areas work together to provide a great product or service for their customer? Are you good at coming up with new ideas or better ways of doing things? Do you like to solve problems and make decisions? Do you get bored easily and like variety? A career in supply chain management may be a good choice for you.

Students entering this program should:

- Enjoy working with people as well as numbers.
- Have good communication skills.
- Be organized and detail oriented.
- Like planning, prioritizing, and setting goals.
- Enjoy working with technology.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Implement Supply Management practices in a global environment
- Demonstrate operations management techniques across product and service industries
- Analyze logistic interfaces and activities in a supply chain
- Evaluate demand management techniques and customer service policies

Related Degrees & Certificates

- Logistics Certificate
- Production Planner Certificate
- Purchasing Agent/Buyer Certificate
- Supply Chain Management Associate Degree

Program Basics

- Technical diploma requiring a minimum of one year to complete.
- All courses offered online.
- Classes start in August and January.
- Financial aid is available to those who qualify.
- High school advanced standing, transcribed, and youth options credits accepted.
- Credit for prior learning available.
- Credits earned in Logistics Pathway Certificate may be applied toward one-year Supply Chain Assistant Technical Diploma.
- Credits earned in one-year Supply Chain Assistant Technical Diploma may be applied to two-year Supply Chain Management Associate Degree.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		14 CREDITS
10-103-106	Beginning Microsoft Excel - 4 week class	1
10-103-118	Intermediate Microsoft Excel - 4 week class	1
10-182-103	Purchasing	3
10-182-104	Inventory Management	3
10-623-110	Lean Concepts	3
10-804-123	Math with Business Applications	3

SEMESTER 2		12 CREDITS
10-182-107	Logistics	3
10-182-108	Global Supply Chain Management	3
10-182-109	Service Operations Management	3
10-182-137	Technology in the Supply Chain	3

SEMESTER 3		6 CREDITS
10-801-195	Written Communication	3
10-804-189	Introductory Statistics	3

Supply Chain Management

10-182-1 • Associate Degree • 61 Credits

This program is 100% online.

Students can build on the online Supply Chain Assistant Technical Diploma and earn an associate's degree in Supply Chain Management. The associate's degree includes additional courses in team building, management, statistics, and lean six sigma. These added courses prepare a student to apply DMAIC (define, measure, analyze, improve and control) to supply chain processes.

Possible Careers

Supply chain management includes a broad range of occupational titles. Those listed below are commonly found in industry, but specific titles will vary according to each individual employer. With additional education and/or work experience, Supply Chain Management program graduates may have additional opportunities in managerial roles such as plant manager, operations manager, production manager, warehouse manager, purchasing manager, inventory manager, distribution manager, transportation manager, logistics manager, and supply chain manager, among others.

The Southwest Tech Career Connections Center offers services to assist students looking for job placement.

Students entering this program should:

- Enjoy working with people as well as numbers.
- Have good communication skills.
- Be organized and detail oriented.
- Like planning, prioritizing, and setting goals.
- Enjoy working with technology.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Implement Supply Management practices in a global environment
- Demonstrate operations management techniques across product and service industries
- Analyze logistic interfaces and activities in a supply chain
- Evaluate demand management techniques and customer service policies

Related Degrees & Certificates

- Related Degrees & Certificates
- Logistics Certificate
- Production Planner Certificate
- Purchasing Agent/Buyer Certificate
- Supply Chain Assistant Technical Diploma

Program Basics

- Associate degree
- 6 semesters – 61 credits
- 100% online, full or part time. Some courses available on campus.
- Classes start every eight weeks
- Financial aid eligible
- Credit for prior learning may be available
- Continuous Improvement (Lean/Lean Six Sigma) Focus

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1 14 CREDITS

10-103-106	Beginning Microsoft Excel - 4 week class	1
10-103-118	Intermediate Microsoft Excel - 4 week class	1
10-182-103	Purchasing	3
10-182-104	Inventory Management	3
10-623-110	Lean Concepts	3
10-804-123	Math with Business Applications	3

SEMESTER 2 12 CREDITS

10-182-107	Logistics	3
10-182-108	Global Supply Chain Management	3
10-182-109	Service Operations Management	3
10-182-137	Technology in the Supply Chain	3

SEMESTER 3 6 CREDITS

10-801-195	Written Communication	3
10-804-189	Introductory Statistics	3

SEMESTER 4 12 CREDITS

10-101-101	Accounting 1, Part 1	2
10-101-127	QuickBooks	1
10-102-130	Management Principles	3
10-196-215	Project Management Fundamentals	3
10-809-199	Psychology of Human Relations	3

SEMESTER 5 11 CREDITS

10-182-138	Supply Chain Capstone	2
10-623-112	Lean Six Sigma	3
10-623-113	Process Mapping/Problem Solving	3
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 6 6 CREDITS

10-809-172	Introduction to Diversity Studies	3
10-809-195	Economics	3

Surgical Technology

10-512-1 • Associate Degree • 61 Credits

Surgical technologists are allied health professionals who are an integral part of the team of medical practitioners providing surgical care to patients in a variety of settings.

The surgical technologist works under medical supervision to facilitate the safe and effective conduct of invasive surgical procedures. This individual works under the supervision of a surgeon to ensure that the operating room or environment is safe, that equipment functions properly, and that the operative procedure is conducted under conditions that maximize patient safety.

A surgical technologist possesses expertise in the theory and application of sterile and aseptic technique and combines the knowledge of human anatomy, surgical procedures, and implementation tools and technologies to facilitate a physician's performance of invasive therapeutic and diagnostic procedures.

Accreditation Status: Accreditation is being applied for through ARC/STSA (Accreditation Review Council on Education in Surgical Technology and Surgical Assisting) with estimated approval November 2024.

Possible Careers

Employment opportunities for Surgical Technology include:

- Surgical Technologist Scrub Role
- Central Supply Technologist
- Surgical Technologist/Private Scrub
- Second Assisting Technologist (with additional education Surgical First Assistant)
- Laser/Endoscopic Technologist
- Tissue/Organ Procurement
- GI Technologist
- OB Technologist
- Surg Tech Instructor
- Vet Technician

Is This Program for You?

- Students who are successful in this field:
- Possess a strong sense of responsibility, considerable patience and concern for others
- Function well as a team member
- Possess manual dexterity and fine motor coordination
- Perform accurately and efficiently under pressure
- Psychological and physical stamina

Helpful Academic Background:

- Biology, Chemistry, and Mathematics
- Computers
- Customer and Personal Service

Program Outcomes

At the completion of this program, students are expected to be able to:

- Apply healthcare and technological science principles to the perioperative environment
- Maintain principles of sterile technique in the surgical environment
- Provide a safe, efficient, and supportive environment for the patient
- Prepare the patient, operating room and surgical team for the preoperative phase
- Perform intraoperative case management in the scrub role

- Perform postoperative case management
- Function as an ethical, legal, and professional member of the healthcare team as determined by governing bodies

Program Basics

- Face-to-Face and Online courses
- Shared courses with the Nursing Program
- Financial aid available to those that qualify
- Summer program start date
- May take some courses immediately upon program acceptance
- Students must achieve a grade of a C or better in each course of the program curriculum to be eligible to progress.
- Current Healthcare Provider CPR certification must be maintained throughout the program. (Courses must include CPR and a hands-on exam must be taken)
- Current students should view their Degree Audit in StudentView
- Students who complete this program can pursue transfer to bachelor degree programs.

SEMESTER 1 (SUMMER)		7 CREDITS
10-501-101	Medical Terminology	3
10-806-177	Gen Anatomy & Physiology	4

SEMESTER 2		13 CREDITS
10-512-125	Intro to Surgical Technology	4
10-512-126	Surgical Tech Fundamentals 1	4
10-512-127	Exploring Surgical Issues	2
10-801-198	Speech * OR *	
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 3		15 CREDITS
10-512-128	Surgical Tech Fundamentals 2	4
10-512-129	Surgical Pharmacology	2
10-512-130	Surgical Skills Application	2
10-801-136	English Composition 1 * OR *	
10-801-195	Written Communication	3
10-806-197	Microbiology	4

SEMESTER 4		13 CREDITS
10-512-131	Surgical Interventions 1	4
10-512-132	Surgical Technology Clinical 1	3
10-512-133	Surgical Technology Clinical 2	3
10-809-198	Intro to Psychology	3

SEMESTER 5		13 CREDITS
10-512-135	Surgical Technology Clinical 3	3
10-512-136	Surgical Technology Clinical 4	3
10-512-142	Surgical Interventions II	4
10-809-172	Introduction to Diversity Studies	3

Sustainable Energy Management

10-481-3 • Associate Degree • 61 Credits

In the United States, buildings represent one of our biggest energy consumers and make up a part of every business's bottom line. As a result, employers are seeking those who are skilled in monitoring energy consumption and recommend energy reduction strategies to reduce costs and dependence on carbon-based fuels. Energy Managers will examine the built environment and how it relates to energy using the latest research, tools, and technology available. You will gain hands-on experience working with community projects and living laboratories in Southwest Tech's state-of-the-art facilities. Graduates will work within a variety of business sectors: utility companies; energy equipment companies, government agencies; and heating, ventilating, air conditioning, and refrigeration contractors.

The focus of the program is to prepare you for entry-level work in the growing renewable energy, energy efficiency, and building systems industry. Having these unique skills will give you a competitive advantage in the job market.

Possible Careers

Employment opportunities include:

- Construction and Building Inspectors
- Energy program coordinator
- Energy Auditors
- Control System Specialist
- Energy Conservation Representative
- Environmental Field Technician
- Weatherization Inspectors

Is This Program for You?

Do you love problem-solving and diverse work? Do you find exploring enjoyable while seeking reliable information? Do you enjoy finding solutions through effectiveness, accuracy, and authenticity? Are you detail-oriented and ambitious? If you possess these attributes and you love innovation, you may have what it takes to pursue a career in energy management.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Evaluate renewable, fossil and other energy resources in context of sustainability, environment, society and economics
- Evaluate building performance and energy use
- Recommend building/site solutions to optimize performance
- Install equipment and materials to optimize performance
- Monitor equipment and systems

Program Basics

- Associate degree, requiring a minimum of 60 credits to complete.
- Online learning, face-to-face classes.
- High school articulation courses accepted.
- Financial aid available.
- Classes start in August.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		14 CREDITS
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-410-101	Construction Fundamentals	3
10-481-101	Solar Photovoltaic Technology	3
10-481-102	Introduction to Renewable Energy	3
10-660-101	Introduction to DC/AC	3

SEMESTER 2		18 CREDITS
10-102-152	Data Analytics 1	3
10-196-215	Project Management Fundamentals	3
10-481-103	Intro to Energy Management	3
10-481-105	Energy Control Strategies	3
10-801-196	Oral/Interpersonal Communication	3
10-809-172	Introduction to Diversity Studies	3

SEMESTER 3		15 CREDITS
10-102-130	Management Principles	3
10-104-105	Selling Principles	3
10-481-104	Lighting Fundamentals	3
10-481-107	Energy Accounting	3
10-801-197	Technical Reporting	3

SEMESTER 4		14 CREDITS
10-481-106	Commercial HVACR Analysis	3
10-481-108	Energy Modeling	3
10-481-109	Sustainable Energy Mngt Career Experience	2
10-804-189	Introductory Statistics	3
10-809-198	Intro to Psychology	3

University Transfer-Associate of Arts

20-800-1 • Associate Degree

The Liberal Arts - Associate of Arts degree provides a concentration on social sciences and humanities. It also provides a foundation if you intend to continue your education at a baccalaureate degree granting college or university. It does this by offering Liberal Arts courses equal to those found in the first two years of a four-year degree.

By completing this degree, you have the benefit of a degree-to-degree transfer, where universities grant junior status and waive specific lower division requirements. These may include general degree requirements and individual courses taken at Southwest Tech.

Diverse Educational Paths

Associate of Arts graduates go on to earn bachelors, masters, and doctoral degrees in a wide variety of disciplines:

- Business (management, marketing, human resources, accounting, finance, economics)
- Communication (English, journalism, mass media)
- Education (early childhood, elementary, secondary, physical)
- Fine Arts (art, music, theatre)
- History
- International Studies
- Literature
- Public Relations
- Social Sciences (psychology, sociology, social work, geography, geology, political science)

Is This Program for You?

If you are interested in earning a bachelor's degree and want the convenience of Southwest Tech's small class sizes, one-on-one attention, and want to save thousands of dollars by taking classes close to home, University Transfer may be a great fit for you.

ASSOCIATE OF ARTS DEGREE PLAN

ENGLISH 6 CREDITS

- English Composition I
- English Composition II

SPEECH 3 CREDITS

HUMANITIES 12 CREDITS

Courses may include:
history, literature, philosophy,
world language

SOCIAL SCIENCE 12 CREDITS

Courses may include:
economics, political science, history,
psychology, sociology

MATHEMATICS & NATURAL SCIENCES 10 CREDITS

- Students minimally complete Statistics or Quantitative Reasoning
- Courses may include: biology, chemistry, geography, geology, and physics.

WORLD LANGUAGE

May be met with 1 year high school (C or better) or 1 college semester.

HEALTH/WELLNESS/PE 1 CREDIT

DIVERSITY & ETHNIC STUDIES

Typically fulfilled through Social Sciences coursework.

ELECTIVES 16 CREDITS

Select any college transfer courses beyond the minimum requirements.

University Transfer-Associate of Science

20-800-2 • Associate Degree

The Associate of Science degree places greater emphasis on science and mathematics. It also provides a foundation if you intend to continue your education at a baccalaureate degree granting college or university by offering Liberal Arts courses equal to those found in the first two years of a four-year degree.

By completing this degree, you have the benefit of a degree-to-degree transfer, where universities grant junior status and automatically waive specific lower division requirements, such as general degree requirements, regardless of individual courses taken at Southwest Tech.

Diverse Educational Paths

Associate of Science graduates go on to earn bachelors, masters, and doctoral degrees in a wide variety of disciplines:

- Architecture
- Business (management, marketing, human resources, accounting, finance, economics)
- Engineering
- Health (dentistry, medicine, nursing, optometry, chiropractic, physical therapy, veterinary, pharmacy)
- Information Technologies
- Mathematics
- Sciences (biology, biochemistry, chemistry, physics, sport/ exercise science)

Is This Program for You?

If you are interested in earning a bachelor’s degree and want the convenience of Southwest Tech’s small class sizes, one-on-one attention, and save thousands of dollars by taking classes close to home, the Associate of Science degree may be a great fit for you.

ASSOCIATE OF ARTS DEGREE PLAN

ENGLISH 6 CREDITS

- English Composition I
- English Composition II

SPEECH 3 CREDITS

HUMANITIES 6 CREDITS

Courses may include:
history, literature, philosophy,
world language

SOCIAL SCIENCE 6 CREDITS

Courses may include:
economics, political science, history,
psychology, sociology

MATHEMATICS & NATURAL SCIENCES 20 CREDITS

- Students minimally complete College Algebra
- Courses may include: biology, chemistry, geography, geology, and physics.

WORLD LANGUAGE

May be met with 1 year high school (C or better) or 1 college semester.

HEALTH/WELLNESS/PE 1 CREDIT

DIVERSITY & ETHNIC STUDIES

Typically fulfilled through Social Sciences coursework.

ELECTIVES 18 CREDITS

Select any college transfer courses beyond the minimum requirements.

Welding

31-442-1 • Technical Diploma • 30 Credits

The welding program trains students in manual, semiautomatic, and robotic welding processes used in a variety of fabrication and construction industries. Students develop skill proficiency through practice in over 19 welding processes, in all positions, and with a variety of metals. In addition, welding students learn to identify base and filler materials and their properties, operate equipment properly, practice correct procedures, test for strength and appearance, work safely and productively, be responsible for quality control, read blueprints for necessary information, measure and use math, and practice good interpersonal relations.

The Southwest Tech Welding program is accredited by the American Welding Society, 8669 NW 36 Street, #130, Miami, Florida 33166. 305-443-9353 / 800-443-9353 (voice) 305-443-7559 (Fax).

Possible Careers

Welding is the most common way of permanently joining metal parts, so welders are employed in a wide variety of manufacturing and construction jobs, including automotive and equipment manufacturing, structural building, maintenance, and repair. Welders may work on land or underwater, inside and outside.

- Welding Technicians, Supervisors, Inspectors, Instructors, Repair Shop Owners
- Pipe Layers, Plumbers, Pipe Fitters and Steam Fitters
- Aircraft Body and Bonded Structure Repairers
- Aircraft Structure Assemblers
- Welder-Fitters
- Weld Fabricators
- Iron Workers
- Ship Building Workers
- Bridge Construction Workers

Is This Program for You?

Do you enjoy building things? Are you mechanically inclined, with strong math skills? Does a job working independently appeal to you? Welding may be a great career choice.

Students entering this program should:

- Enjoy building things.
- Have good math skills.
- Have manual dexterity.
- Be able to work with little direction or supervision.
- Have good vision (glasses are acceptable).
- Have good hand-eye coordination.
- Be able to concentrate with patience on detailed work.

Program Outcomes

At the completion of this program, students are expected to be able to:

- Demonstrate industry-recognized safety practices
- Interpret welding drawings
- Produce shielded metal arc welds (SMAW)
- Produce gas metal arc welds (GMAW)
- Produce flux core welds
- Produce gas tungsten arc welds (GTAW)
- Perform cutting operations
- Produce Oxyfuel welds

Program Basics

- Technical diploma, requiring a minimum of nine months to complete.
- High school articulation courses accepted.
- Financial aid available.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		16 CREDITS
31-442-310	Equipment Safety	1
31-442-311	Oxyfuel Gas Cutting & Gouging	1
31-442-312	Arc Cutting & Gouging	1
31-442-313	Plasma Cutting & Gouging	1
31-442-314	Oxyfuel Equipment	1
31-442-315	Oxyfuel Brazing & Welding- Carbon Steel	1
31-442-316	Oxyfuel Brazing & Welding- Stainless Steel	1
31-442-320	SMAW - Equipment	1
31-442-336	SMAW	2
31-457-317	Forming & Folding Metal	1
31-457-318	Fabricating	1
31-457-334	Fabrication Planning & Drawing	1
31-804-305	Applied Mathematics	2
32-442-308	Blueprint Reading-Welding 1	1

SEMESTER 2		14 CREDITS
31-442-323	GTAW - Equipment	1
31-442-324	GTAW - Carbon Steel	1
31-442-325	GTAW - Aluminum	1
31-442-326	GTAW - Stainless Steel	1
31-442-327	GMAW - Equipment	1
31-442-328	GMAW - Carbon Steel (S Process)	1
31-442-329	GMAW - Aluminum	1
31-442-330	GMAW - Stainless Steel	1
31-442-331	GMAW - Carbon Steel (Spray Transfer)	1
31-442-332	FCAW - Equipment	1
31-442-333	FCAW - Carbon Steel (Gas Shielded)	1
31-801-310	Workplace Communication	2
32-442-309	Blueprint Reading-Welding 2	1

Certificates

Certificate programs provide an opportunity to get a start on a new career or enhance your current skills. Many of the credits earned can be directly applied to a technical diploma or associate degree!

Agriculture, Food, and Natural Resources

Agribusiness, Science & Technology- Applicator Technician Certificate

61-006-4 • Certificate • 10 Credits

The Applicator Tech program prepares you to mix or apply pesticides, herbicides, fungicides, or insecticides through sprays, dusts, vapors, soil incorporations or chemical application on crops. This certificate will prepare you for entry as an Applicator Technician.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		10 CREDITS
10-006-124	Pesticide Applicator Training	1
10-006-125	Crop Protection Products	2
10-006-126	Pest ID & Mgt/Crop Scouting	3
10-070-101	Field Application Equipment	2
10-070-104	Ag Safety, Electrical & Maintenance	2

These courses are not eligible for financial aid unless the student is enrolled in an eligible program. Please see an advisor to determine financial aid eligibility.

Health Sciences

Cancer Information Management Advanced Technical Certificate

61-307-3 • Advanced Technical Certificate • 25 Credits

The Cancer Information Management Advanced Technical Certificate is designed to prepare students for a career working in hospital-based or population-based cancer registries. Graduates serve a critical role of collecting managing, and disseminating vital data that goes into cancer registries.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		7 CREDITS
10-530-110	Introduction to Cancer Registry Management	3
10-530-111	Cancer Disease Management	4

SEMESTER 2		12 CREDITS
10-530-112	Oncology Coding and Staging	4
10-530-113	Cancer Statistics and Epidemiology	3
10-530-114	Abstracting Principles and Practice 1	3
10-530-115	Cancer Patient Follow-up	2

SEMESTER 3		6 CREDITS
10-530-116	Abstracting Principles and Practice 1	3
10-530-115	Cancer Registry Management Practicum	3

These courses are not eligible for financial aid unless the student is enrolled in an eligible program. Please see an advisor to determine financial aid eligibility.

Early Childhood Licensing Basic Ages 0–2

61-307-3 • Pathway Certificate • 9 Credits

This certificate is designed for individuals wishing to satisfy the state of Wisconsin Licensing Code, DCF251, Licensing Rules for Group Child Care Centers. All courses in this certificate will transfer into the Early Childhood Education Associate Degree program.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		9 CREDITS
10-307-148	ECE: Foundations of ECE	3
10-307-151	ECE: Infant & Toddler Dev	3
10-307-167	ECE: Hlth Safety & Nutrition	3

These courses are not eligible for financial aid unless the student is enrolled in an eligible program. Please see an advisor to determine financial aid eligibility.

Business, Management, & Administration

Logistics

61-182-1 • Pathway Certificate • 14 Credits

This program is 100% online.

Logistics Pathway is designed to equip the student with the skills necessary to be successful in improving efficiency and profitability within the supply chain. Potential occupations include: Freight Broker, Logistics Coordinator, Load Planner, International Coordinator, Cargo Agent, Freight Forwarder, Receiving Manager, Traffic Manager, Shipping Coordinator, Transportation Supervisor, Warehouse Supervisor, Fleet Manager, Loader Operator, Shipping and Receiving Operator or Shipper, among others.

Possible job titles associated with logistics include:

- Load Planner
- Logistics Coordinator
- Intermodal Dispatcher
- Shipping Clerk
- Supervisor
- International Coordinator
- Shipping and Receiving Operator

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		5 CREDITS
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-623-110	Lean Concepts	3

SEMESTER 2		9 CREDITS
10-182-107	Logistics	3
10-182-108	Global Supply Chain Management	3
10-182-137	Technology in the Supply Chain	3

These courses are not eligible for financial aid unless the student is enrolled in an eligible program. Please see an advisor to determine financial aid eligibility.

Business, Management, & Administration

Payroll Assistant Certificate

61-101-3 • Pathway Certificate • 12 Credits

Learn the basics of managing payroll. As a student in the Payroll Assistant Certificate, you will learn to review time sheets, work charts, and calculate wages, exemptions, transfers, and deductions.

Career Pathway

Credits earned in the Payroll Assistant Pathway Certificate may be applied toward the one-year Accounting Assistant Technical Diploma and the Accounting Associate Degree.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		9 CREDITS
10-101-111	Accounting 1	4
10-103-105	Beginning Microsoft Word	1
10-103-106	Beginning Microsoft Excel	1
10-801-196	Oral/Interpersonal Communication	3

SEMESTER 2		3 CREDITS
10-101-123	Payroll Applications	2
10-101-127	QuickBooks	1

These courses are not eligible for financial aid unless the student is enrolled in an eligible program. Please see an advisor to determine financial aid eligibility.

Production Planner

61-182-5 • Pathway Certificate • 11 Credits

This program is 100% online.

Production Planners are involved with the planning and controlling of the flow of materials and information to effectively manage an organization's resources, minimize costs, and provide high levels of customer service. Completion of the Production Planner Pathway Certificate will prepare you for an introductory position within supply chain management, help you cross train in a new area, or expand your skills within a short time period.

Related Degrees & Certificates

- Logistics or
- Purchasing Agent/Buyer
- Supply Chain Assistant Technical Diploma
- Supply Chain Management Associate Degree

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		8 CREDITS
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-182-104	Inventory Management	3
10-623-110	Lean Concepts	3

SEMESTER 2		3 CREDITS
10-182-137	Technology in the Supply Chain	3

These courses are not eligible for financial aid unless the student is enrolled in an eligible program. Please see an advisor to determine financial aid eligibility.

Purchasing Agent/Buyer

61-182-4 • Pathway Certificate • 14 Credits

This program is 100% online.

Purchasing Agents/Buyers are involved with selecting and evaluating suppliers, creating and maintaining supplier relationships, and negotiating prices to minimize costs, and improve on time delivery. Completion of the Purchasing Agent/Buyer Pathway Certificate will prepare you for an introductory position within supply chain management, help you cross train in a new area, or expand your skills within a short time period.

Related Degrees & Certificates

- Logistics or
- Production Planner
- Supply Chain Assistant Technical Diploma
- Supply Chain Management Associate Degree

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		8 CREDITS
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-182-103	Purchasing	3
10-623-110	Lean Concepts	3

SEMESTER 2		6 CREDITS
10-182-108	Global Supply Chain Management	3
10-182-137	Technology in the Supply Chain	3

These courses are not eligible for financial aid unless the student is enrolled in an eligible program. Please see an advisor to determine financial aid eligibility.

Solar Installation Technician

61-481-5 • Pathway Certificate • 14 Credits

The Solar Installation Technician certificate is designed to address the needs of regional utility power supplies that offer renewable energy options, as well as private companies that provide solar solutions for residential, commercial, non-profit, and government sectors.

Helpful Academic Background

- Math and science
- Written and oral communications
- Electricity, electronics or mechanics

Related Degrees

- Sustainable Energy Management Associate Degree
- Building Performance Technician Technical Diploma

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		14 CREDITS
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-410-101	Construction Fundamentals	3
10-481-101	Solar Photovoltaic Technology	3
10-481-102	Introduction to Renewable Energy	3
10-660-101	Introduction to DC/AC	3

Finance

Tax Preparer Assistant

61-101-2 • Pathway Certificate • 12 Credits

Prepare tax returns for individuals or small businesses. As a student in the Tax Preparer Assistant Certificate, you will learn to conduct tax interviews, use appropriate tax adjustments, and prepare simple or complex tax returns.

Career Pathway

Credits earned in the Tax Preparer Pathway Certificate may be applied toward the one-year Accounting Assistant Technical Diploma and the Accounting Associate Degree.

Curriculum listed is tentative for the 2023-24 academic year. Current students should view their Degree Audit in the Student Portal.

SEMESTER 1		12 CREDITS
10-101-111	Accounting 1	4
10-101-117	Taxes 1	3
10-103-105	Beginning Microsoft Word	1
10-103-106	Beginning Microsoft Excel	1
10-801-196	Oral/Interpersonal Communication	3

These courses are not eligible for financial aid unless the student is enrolled in an eligible program. Please see an advisor to determine financial aid eligibility.

Apprenticeships

Because the construction and industrial trades are constantly changing, apprentices are now more important than ever! Apprenticeships are formal learning programs that emphasize on-the-job training under the supervision of qualified tradespeople along with classroom instruction at Southwest Tech. Terms of apprenticeships vary but usually are four to five years and require specified hours of day school, night school, and prescribed work experience. In a typical week apprentices attend Southwest Tech one day a week and work for their employer the remaining time.

Southwest Tech's Electrical, Plumbing, and Mechatronics Apprenticeship programs combine classroom learning with hands-on training. Southwest Tech instructors are State of Wisconsin Certified Master Electricians and Plumbers as well as Certified instructors by the State of Wisconsin Technical College (WTCS) System.

Architecture & Construction

Construction Electrician Apprenticeship

50-413-2 • Apprenticeship • 17 Credits

Construction electricians lay out, assemble, install and test electrical circuits of fixtures, controls and switches, alarms, communications, and light and power systems. The Construction Electrician Apprenticeship Program is five years in length, consisting of 8,000 hours. The apprentice attends 576 hours of paid related instruction classes at Southwest Tech. Classes are usually one 8-hour day every other week between August and May. Apprentices must also complete unpaid related instruction in OSHA safety, NEC code, First Aid, CPR, and Transition to Trainer. Apprentices must take and pass the State Electrical Journeyman Exam prior to the completion of the Apprenticeship Contract.

Program Outcomes

A student successfully completing this program will be able to do the following:

- Installing new wiring and repairing old wiring.
- Installing receptacles, lighting systems and fixtures.
- Planning and installing raceway systems.
- Troubleshooting and repairing electrical systems.
- Planning and initiating projects.
- Establishing temporary power during construction.
- Establishing power distribution within project.
- Establishing grounding system.
- Installing service to buildings and other structures.
- Providing power and controls to motors, HVAC, and other equipment.
- Installing fire alarm systems.
- Installing and repairing traffic signals, outdoor lighting, and outdoor power feeders.
- Establishing OSHA and customer safety requirements.
- Installing instrumentation and process control systems, including energy management systems.
- Erecting and assembling power generation equipment.
- Installing security systems.
- Installing, maintaining and repairing lighting protection systems.
- Installing and repairing telephone and data systems.

Curriculum listed is tentative for the 2023-24 academic year.

SEMESTER 1		17 CREDITS
50-413-521	Construction Electrician I	2
50-413-522	Construction Electrician II	2
50-413-523	Construction Electrician III	2
50-413-524	Construction Electrician IV	2
50-413-525	Construction Electrician V	2
50-413-526	Construction Electrician VI	2
50-413-527	Construction Electrician VII	2
50-413-528	Construction Electrician VIII	2
50-413-535	Construction Safety/Health OSHA	1

This course is not eligible for financial aid.

Industrial Electrician Apprenticeship

50-413-1 • Apprenticeship • 20 Credits

The industrial electrician maintains and repairs many different types of electrical equipment. They may also modify or install electrical equipment like motors, transformers, generators, machine controls and lighting systems in industrial, commercial and public establishments. The electrician is responsible for the periodic inspection of equipment to locate and repair defects before breakdowns occur.

The Industrial Electrician Apprenticeship Program is four years in length. The apprentice attends 720 hours of paid related instruction classes at Southwest Tech.

Typical duties of electricians include:

- performing preventive maintenance.
- replacing units or parts such as wiring, fuses, circuit breakers, coils or switches; measuring, cutting, bending, threading and installing circuits.
- using test meter.
- working from blueprints and diagrams.
- making mathematical computations.
- troubleshooting AC and DC drives.
- installing programmable logic controllers.

Program Outcomes

A student successfully completing this program will be able to do the following:

- Maintain safe working practices through the use of safety guidelines.
- Select, maintain and properly use tools and equipment.
- Install and maintain power distribution and lighting systems.
- Install and maintain industrial machinery and equipment including panel building.
- Install and maintain material handling equipment, welding equipment and robotics.
- Install and maintain general plant equipment.
- Install and maintain communication systems.
- Install and maintain high voltage equipment, including sub-stations.
- Read, interpret and revise drawings and specifications.
- Select, install and maintain motor drives and controls.

Curriculum listed is tentative for the 2023-24 academic year.

SEMESTER 1		20 CREDITS
50-413-501	Industrial Electrician I	4
50-413-502	Industrial Electrician II	4
50-413-503	Industrial Electrician III	2
50-413-504	Industrial Electrician IV	2
50-413-505	Industrial Electrician V	2
50-413-506	Industrial Electrician VI	2
50-413-507	Industrial Electrician VII	2
50-413-508	Industrial Electrician VIII	2

This course is not eligible for financial aid.

Mechatronics Technician Apprenticeship

50-620-1 • Apprenticeship • 24 Credits

A Mechatronics Technician is an electrical, mechanical, and electronics systems technician in industrial plants. The job includes work in automation and robotics in modern manufacturing processes. Work processes include installing, repairing, and maintaining equipment/devices. Workers typically troubleshoot, operate, and debug industrial computer and communication systems, including Programmable Logic Controls (PLC), and Human Machine Interface (HMI) technologies. They also machine metal and other materials, fabricate parts, and weld/join components.

The Mechatronics Technician Apprenticeship program is five years in length, with a minimum 10,000 hours. The apprentice attends 864 hours of paid, related instruction classes at Southwest Tech and will complete the Transition to Trainer course in the final year.

Possible Careers

- Robotics Technicians
- Mechanical Engineering Technicians
- Manufacturing Production Technicians
- Electrical and Electronics Repairers
- Industrial Machinery Mechanics
- Automation Technician
- Machine Wireman
- Control Panel Assembler
- Machinist
- Converting Mechanic
- Maintenance Helper
- Field Service Technician
- Maintenance Mechanic
- Industrial Electrician
- Maintenance Technician
- Industrial Mechanic
- Manufacturing Technician
- Industrial Technician
- Mechanical Assembly Technician
- Oiler
- Machine Checkout Technician

Program Outcomes

At the completion of this program, students are expected to be able to:

- Expand Perform work safely
- Install mechanical equipment
- Install electrical equipment
- Maintain mechanical equipment
- Troubleshoot mechatronic systems
- Operate machine shop tools and machines
- Weld and fabricate parts
- Maintain automation systems
- Modify devices and systems
- Maintain documents and records
- Local options and work processes

Curriculum listed is tentative for the 2023-24 academic year.

SEMESTER 1 4 CREDITS

50-620-701	Trade Math Review for Mechatronics Apprentices	1
50-620-702	Mechatronic Principles	2
50-620-703	DC Electricity for Mechatronics	1

SEMESTER 2 4 CREDITS

50-620-704	AC Electricity for Mechatronics	1
50-620-705	Motors & Motor Control for Mechatronics	2
50-620-706	Electrical Codes for Mechatronics	1

SEMESTER 3 4 CREDITS

50-620-708	Fluid Power Systems for Mechatronics Apprentices	2
50-620-709	Servos and Drives for Mechatronics	1
50-620-710	Power Transmission Systems for Mechatronics	1

SEMESTER 4 4 CREDITS

50-620-711	Machining Concepts for Mechatronics	2
50-620-712	Introduction to Programmable Logic Controllers	2

SEMESTER 5 4 CREDITS

50-620-714	HMI Technologies & PLC Applications for Mechatronics	2
50-620-715	Introduction to Robotics Systems for Mechatronics	2

SEMESTER 6 4 CREDITS

50-620-707	Welding Basics for Mechatronics	1
50-620-716	Introduction to Robotic Integration	3



Plumbing Apprenticeship

50-427-5 • Apprenticeship • 21 Credits

Plumbers install, repair and maintain the water supply, waste water treatment, drainage and gas systems in homes, commercial and industrial buildings. The work includes plumbing tasks to assemble, install and repair pipes, fittings, and fixtures of heating, water and drainage systems according to specifications and plumbing codes.

The Technical Plumbing Apprenticeship program is five years in length, with a minimum of 8,000 hours. This includes 572 hours of paid related instruction and 260 hours of unpaid instruction, plus an 8 hour Plumbing Prep Test-Out Exam or a 54 hour Plumbing Code Review Course.

Included in the 572 hours of day school and 260 hours of night school Plumbing Apprenticeship training:

- OSHA 30-hour Safety Training
- Water distribution
- Cross connection control
- Sanitary drains
- Vents and venting
- Private onsite wastewater treatment systems
- Green plumbing
- Solar hot water
- Water reuse
- Storm water
- State of Wisconsin Department of Safety and Professional Services Administrative Code

Program Outcomes

A student successfully completing this program will be able to do the following:

- Assemble pipe sections, tubing and fittings, using couplings, hangers, cement, and plastic solvent, soldering, brazing and welding equipment.
- Cut openings in structures to accommodate pipes and pipe fittings, using hand and power tools.
- Fill pipes or plumbing fixtures with water or air and observe pressure gauges to detect and locate leaks.
- Hang steel supports from ceiling joists to hold pipes in place.
- Install pipe assemblies, fitting, valves, appliances such as dishwashers and water heaters, and fixtures such as sinks and toilets, using hand and power tools.
- Install underground storm, sanitary and water piping systems and extend piping to connect fixtures and plumbing to these systems.
- Repair and maintain plumbing, replace defective washers, replace or mend broken pipes, and opening clogged drains.
- Interpret building plans and inspect structures to assess material and equipment needs.
- Determine the material, methods, and tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.
- Maintain a working knowledge of machines and tools, including their designs, uses and repairs.
- Maintain a working knowledge of blueprint reading, the plumbing code, math and theory.
- Must be able to understand detailed written and verbal communication.

Curriculum listed is tentative for the 2023-24 academic year.

SEMESTER 1		4 CREDITS
50-427-751	Sanitary Drains 1	2
50-427-752	Vents and Venting Systems	2

SEMESTER 2		4 CREDITS
50-427-753	Water Distribution 1	2
50-427-754	Water Distribution 2	2

SEMESTER 3		4 CREDITS
50-427-755	Sanitary Drains 2	2
50-427-756	Private On-site Wastewater Treatment Systems (POWTS)	2

SEMESTER 4		4 CREDITS
50-427-757	Green Plumbing Applications	2
50-427-758	Plumbing Advanced Topics/TSA	2

ELECTIVES		5 CREDITS
50-427-760	Plumbing Applications	1
50-427-761	Plumbing Service and Repair	1.25
50-427-762	Plumbing Blueprint Reading	1.25
50-427-763	Plumbing PRI Independent Study	1
50-427-770	Plumbing PRI Independent Study - Makeup Hours	0.5

This course is not eligible for financial aid.



Technical Studies—Journeyworker

10-499-5 • Associate Degree • 60 Credits

The Technical Studies-Journeyworker program provides students who have completed a registered apprenticeship program an option to receive an associate degree designed around individual needs. The Journeyworker Associate of Applied Science (AAS) degree is a 60 credit degree designed for individuals seeking academic recognition for the completion of a registered apprenticeship. It is intended to support lifelong learning and accelerate the achievement of individual career goals.

Possible Careers:

This program will be designed for each individual student. Career opportunities will depend on the courses that are selected to meet the student's career goals. It is anticipated that a student will design a program plan that will meet the requirements of a particular career area.

Program Outcomes:

This program provides students who have completed a registered apprenticeship program an option to receive an associate degree designed around individual needs.

Degree Completion Requirements:

- Possess a Wisconsin Apprenticeship Completion Certificate issued by the Department of Workforce Development-Bureau of Apprenticeship Standards registered program which includes a minimum of 400 hours of prescribed apprentice related technical instruction in the Wisconsin Technical College System.
- Complete all prescribed WTCS apprentice related technical instruction. Possession of the DWD-BAS Wisconsin Apprenticeship Completion Certificate AND successful completion of all prescribed coursework fulfills the 39 credit minimum technical studies requirement of the Technical Studies – Journeyworker Associate of Applied Science degree.
- Meet the WTCS Associate of Applied Science Degree requirement for a minimum of 21 credits. This consists of 15 credits of general education distributed across Communications, Social Science, Behavioral Science, Math and/or Science categories as well as 6 elective Associate Degree Level Technical Studies or additional general education credits.
- Complete at least 25% of the total program credits through coursework undertaken at the technical college granting the AAS degree and meet any institutional graduation requirements. A WTCS apprenticeship program with at least 400 hours of paid related instruction (PRI) meets this threshold.

Program Basics:

- Associate degree
- Day, evening, or online classes available
- Financial aid available
- Classes start in June, August, or January

Curriculum listed is tentative for the 2023-24 academic year.

COMMUNICATIONS 6 CREDITS

10-801-136	English Composition 1
10-801-195	Written Communication
10-801-196	Oral/Interpersonal Communication
10-801-197	Technical Reporting
10-801-198	Speech

SOCIAL SCIENCE 3 CREDITS

10-809-122	Intro to American Government
10-809-128	Marriage & Family
10-809-143	Microeconomics
10-809-166	Intro to Ethics: Theory & App
10-809-172	Introduction to Diversity Studies
10-809-195	Economics
10-809-196	Intro to Sociology

BEHAVIORAL SCIENCE 3 CREDITS

10-809-159	Abnormal Psychology
10-809-188	Development Psychology
10-809-198	Intro to Psychology
10-809-199	Psychology of Human Relations

MATH AND/OR SCIENCE 3 CREDITS

10-804-107	College Mathematics
10-804-113	Technical Math 1A
10-804-114	Technical Math 1B
10-804-118	Interm Algebra w Apps
10-804-123	Math w Business Apps
10-804-133	Math & Logic
10-806-143	College Physics
10-804-189	Introductory Statistics
10-804-195	College Algebra w Apps
10-804-196	Trigonometry with Apps
10-806-154	General Physics 1
10-806-177	Gen Anatomy & Physiology
10-806-179	Adv Anatomy & Physiology
10-806-186	Intro to Biochemistry
10-806-189	Basic Anatomy
10-806-197	Microbiology

ASSOCIATE DEGREE LEVEL TECHNICAL STUDIES OR ADDITIONAL GENERAL EDUCATION 6 CREDITS

Students in this program are required to take 6 credits of Associate Degree Level Technical Studies (10-xxx-xxx) or an additional 6 General Education credits. The additional General Education credits may come from the list above. Contact the program Advisor to discuss options or credits for consideration.

OCCUPATIONAL SPECIFIC COURSES 39 CREDITS

Occupational Specific Courses are met by a Wisconsin Apprenticeship Completion Certificate, issued by the Department of Workforce Development-Bureau of Apprenticeship Standards (DWD-BAS) registered program. The program must include a minimum of 400 hours of prescribed apprentice-related instruction in the Wisconsin Technical College System.

Continuing Education

Agriculture Training

The following optional stand-alone courses are open to anyone. For course descriptions and availability, visit www.swtc.edu/ag.

- CDL Training
- Tractor Driving Safety Training
- Skidloader Safety Training
- Diverse Cultures in Agriculture
- Artificial Insemination-Dairy

Dairy Goat Herd Management Certificate

Whether you are interested in starting a career in dairy goat production, recently started milking dairy goats, or are well established in the dairy goat industry, this certificate is for you! You will be able to earn a certificate by completing:

- 12 online courses with experiential learning components
- An annual Goat Management Academy providing hands-on training

Visit www.swtc.edu/dairygoat, email dairygoat@swtc.edu or call 608.822.2723 for more information.

Farm Business & Production Management

Our industry experts are ready to work one-on-one with you to help build your business. This program gives current farm owners/operators opportunities to develop and fine tune their skills with production agriculture. Knowledge and skills are provided through classroom settings, workshops and seminars, speakers of expertise, farm and business tours, and individual on-farm instruction.

Beginning Farm Management

- Open to high school juniors and seniors
- Focuses on developing a business plan for a production agriculture career

Adult Farm Management Course Offerings:

- Livestock Management
- Financial Management
- Crop Management
- Nutrient Management Planning

Individual instruction is available in the following areas:

- Financial Analysis
- Business and Marketing Planning
- Feasibility Study/Cash Flow
- Farm Succession Planning
- Nutrient Management Planning Update
- Computer Software Training

Visit www.swtc.edu/fbpm or call 608.822.2741 for more information

Health Training

IV Therapy

This program is designed to present basic concepts in IV therapy. Topics will include current infusion standards, guidelines and regulatory issues, blood draws for specimens, venipuncture, common types of intravenous solutions and medications, care of venous access devices, and the prevention and management of IV related complications. Participants will have the opportunity to practice skills presented with current IV equipment following the presentations. Email nhubbard@swtc.edu or call 608.822.2209 for more information.

Birth Doula Labor Support Workshop

Course participants will develop basic emotional, physical, and informational skills in order to increase their effectiveness as a labor support person. The course will cover basic childbirth education information, the responsibilities of the birth doula, emotional support skills and physical comfort measures, getting along with physicians and nurses, topics to cover during prenatal visits, handling challenging labors, and strategies for developing a business. Email nhubbard@swtc.edu or call 608.822.2209 for more information.

Emergency Medical Services Training

Southwest Tech offers initial and continuing education for area emergency medical service providers at various levels including EMR, EMT and AEMT. All courses are based on the State of Wisconsin adopted curriculum with the inclusion of the National Education Standards. Depending on provider level and service requirements Southwest Tech also offers required and supplementary continuing education to maintain and enhance the level of care provided by our community's emergency responders. Visit www.swtc.edu/ems for current course offerings. Email kschoville@swtc.edu or call 608.822.2665 for more information.

Business & Industry Services

Southwest Tech, through its Business & Industry Services office, provides a full array of education, training and performance improvement solutions fit your needs. Whether you are an individual looking to build your skills or an employer looking to provide a few employees with training opportunities, these workshops are designed to meet your needs. Customized training and technical assistance is provided by industry experts, who will work with you and your team to solve production problems, increase productivity, and reduce costs through targeted employee training programs. Open enrollment training opportunities are available and can be accessed via our continuing education portal at www.swtc.edu/bisreg, if you don't see the training you are looking for reach out to us through our website www.swtc.edu/bis, email bis@swtc.edu or call 608.822.2323.

Leadership Training: Leadership Training can fill the leadership skill gaps in your company or organization through customized training. We offer a variety of options for training in core values, time, stress and change management, as well as workshops in Strengths Finder, Everything DiSC Workplace, workplace communication and much more. No matter which option you choose, we use the same formula for success, first we Grow the Person, then we Develop the Leader, and finally we Build the Team.

LEAN Training: As a continuous improvement model, Lean focuses on the reduction of non-value added activities (waste) in product/service delivery processes. Although Lean has its roots firmly in manufacturing, the principles and practices have been effectively implemented in health care, education, government, banking and other service industries.

Project Management: Are you ready to take your project management skills to the next level? This comprehensive course is designed to provide you with the essential knowledge and skills needed to successfully plan, execute, and oversee projects of all sizes and complexities.

Spanish for the Workplace: Learn about Hispanic/Latino culture and basic Spanish words and phrases to improve workplace communication with native Spanish-speakers. Topics include introductory conversations, common Spanish phrases, basic workplace commands, making inquiries and asking questions and safety/emergency phrases.

Mental Health First Aid: Mental Health First Aid teaches you how to identify, understand, and respond to signs of mental illness and substance use disorders. This training gives you the skills you need to reach out and provide initial support to someone who may be developing a mental health or substance use problem and help connect them to the appropriate care.

Industrial Training: Electro-Mechanical Technology training, such as programmable logic controls (PLCs), motor control, mechatronics, electrical wiring and more can be customized to fit the needs of your business. Our new state-of-the-art mobile trainers can be brought right to your business for ease of scheduling.

Welding: On site, on campus, or in our Welding trailer, training can be customized to fit your needs. Students can take an entire class, utilize our Open Weld Nights to brush up on skills, and take an AWS Certification.

Compliance and Safety: Learn about OSHA standards, policies and procedures, or discuss electrical safety program requirements. Whatever your needs, we can help you stay compliant and up to date when it comes to safety training.

Small Business Development: We can offer customized training in areas such as Microsoft Word/Excel, Marketing (social media), QuickBooks, Customer Service and more! We can also provide Strategic Planning and Business Development consultation.

Public Safety Training

Fire Services Training

The Certified Firefighter courses are accredited by the International Fire Service Accreditation Congress (IFSAC). Fire Service Training provides initial training and continuing education to local firefighters. The core firefighting courses are based on the National Fire Protection Association Standard 1001 – Firefighter Professional Qualifications. The State of Wisconsin requires minimum training and establishes certification standards. The courses offered help firefighters achieve these goals. The Certified Firefighter courses are accredited by the International Fire Service Accreditation Congress (IFSAC). Technical Rescue and Hazardous Materials Response courses are also offered as well as locally delivered National Fire Academy courses. Visit www.swtc.edu/fire for current course offerings. Email publicsafety@swtc.edu or call 608.822.2700 for more information.

Law Enforcement Training

Southwest Tech serves the communities of Southwest Wisconsin with many options for all levels of training in the criminal justice and law enforcement industry. Email publicsafety@swtc.edu or call 608.822.2709 for more information about the following courses:

200-Hour Jail Academy

Learn key concepts and requirements underlying county jail operations and an introduction to the role of the jail officer as a corrections professional. This 5-week course is open to both pre-service and hired jail officers and is offered one time per year during the summer. The criteria was established by the Wisconsin Department of Justice, Training and Standards Bureau. pre-service and hired jail officers and is offered one time per year during the summer. The criteria was established by the Wisconsin Department of Justice, Training and Standards Bureau.

Law Enforcement Professional Development

Southwest Tech offers a variety of in-service, advanced and specialized law enforcement professional development classes. These courses provide the essential skills, knowledge, and resources necessary for law enforcement officers to stay on top of the changes that are occurring in this field. NOTE: Only certified law enforcement officers are eligible to take these professional development courses.

Community Education & Services

3-Wheel Basic Rider Course

Southwest Tech is one of two locations in Wisconsin that offers a 3-wheel Motorcycle Basic Rider Course. Successful completion of the course will allow students to earn a waiver from the DMV 3-wheel motorcycle skills test. The class consists of 6 classroom hours and 10 riding hours on the new motorcycle range within the Public Safety Complex. Students will be able to use their own 3-wheel motorcycles in the class. Class size is limited to 6 students to allow for a safer, more effective riding environment. Courses run from April through October. **Email trafficsafety@swtc.edu or call 608.822.2709 for more information.**

Adverse Weather Driver Training

In this course, the student will receive instruction on common weather-related factors that lead to adverse driving conditions. Students will receive hands-on driving instruction in techniques designed to make the driver more able to safely operate his or her vehicle in poor and dangerous driving conditions. **Email driversed@swtc.edu or call 608.822.2466 for more information.**

CPR/AED/First Aid Training

Southwest Tech is an aligned American Heart Association (AHA) Training Center. We offer CPR and First Aid classes at different skill and certification levels based on AHA curriculum. Visit www.swtc.edu/cpr for current course offerings. **Email greynolds@swtc.edu or call 608.822.2648 for more information.**

Driver Education

Southwest Tech offers both traditional and online driver education to students within our district and throughout the state, as well as behind-the-wheel instruction for our district high schools. Register for driver education classes at your high school. Students must be 15 years of age or older and enrolled as a student or live within the one of our high school districts. Parents of home-schooled students, please contact your district high school for confirmation of class dates and times. **Email driversed@swtc.edu or call 608.822.2466 for more information.**

Driver Safety Education Certification

This 9-credit Driver and Safety Education Certification program provides training to teach Driver Education within public, private, commercial and Technical Colleges throughout the state. Students will learn to teach the goals and outcomes of driver and traffic safety education. These goals include in-car instruction, including observation, curriculum development and practical experience behind-the-wheel; curriculum information selection, development and use, with observation and teaching activities and classroom curriculum development; problems of alcohol, drugs and addiction, the effects of physiological, psychological and sociological aspects, as well as how education programs are utilized within our community and schools; behavioral aspects in accident prevention using concepts and methods to understand the impact on unsatisfactory driver-related attitudes and behaviors; and basic concepts and principles of safety and loss prevention, with an emphasis on various teaching techniques relating to school and roadway safety and risk awareness.

Helpful Academic Background:

- Wisconsin provisional, lifetime, or master educator license
- Completion of either a Bachelors or Masters degree
- Employment with CESA, Technical College, K-12 School or DOT driving school
- Good verbal and non-verbal communication skills

Email driversed@swtc.edu or call 608.822.2466 for more information.

Firearms Training

The Southwest Tech Firearms Training Range is located at Southwest Tech's Public Safety Complex and features three separate shooting ranges designed with the most sophisticated and innovative equipment to meet a variety of training applications. The range hosts a variety of training courses including law enforcement academy training, advanced law enforcement training and a variety of civilian based courses such as the following:

- Beginner, Basic, Intermediate, or Advanced Handgun
- Basic Revolver
- Basic Hunting Shotgun, Rifle or Semi-Auto Rifle
- Concealed Carry
- Firearms Safety and Awareness

Email publicsafety@swtc.edu or call 608.822.2700 for more information.

Group Dynamics

The Group Dynamics / Traffic Safety School Program is one highway safety initiative within Wisconsin which aims to reduce the number and frequency of alcohol related crashes. Specifically, the course is designed to assist those involved in alcohol/traffic related offenses to make permanent changes in their drinking and driving behavior and attitudes. There is a minimum of 24 classroom hours contained in this alcohol educational program. A three point credit to your current driving record can be requested upon completion of this course. For all convicted of drunk driving if ordered through their treatment plan. **Email trafficsafety@swtc.edu or call 608.822.2700 for more information.**

Motorcycle Safety

Cycling requires special knowledge and skills that beginning riders likely do not have. Accident rates are high, and the cyclist must be constantly on the alert to avoid dangerous situations. Riders must be especially careful of changes in road and weather conditions. Statistics show that 60 percent of all accidents happen to those with less than one year of riding experience. Courses run from April through October. **Email trafficsafety@swtc.edu or call 608.822.2709 for more information.**

Multiple Offender Program

The Multiple Offender Program is a specialized education course for individuals who have experienced two or more operating while intoxicated (OWI) charges. Participants are encouraged to examine their drinking and driving behavior and attitudes, and to formulate an alternative lifestyle which will improve their ability to operate a vehicle safely. The Multiple Offender Program is not designed as a treatment program. It is intended to benefit the irresponsible drinker who is experiencing continual problems with drinking and driving. Individuals assessed as chemically dependent should not be referred to the program. **Email trafficsafety@swtc.edu or call 608.822.2700 for more information.**

Point Reduction

Students discuss and develop strategies to incorporate positive behaviors and techniques into their driving skills. Students participate in group discussions regarding their personal driving behaviors. Accumulated demerit points may be reduced by three upon successful completion of this course. **Email trafficsafety@swtc.edu or call 608.822.2700 for more information.**

Safety Training

At Southwest Tech, we believe education and prevention are the keys to saving lives. Our classes are designed to help you respond appropriately to emergencies.

- Fire Extinguisher Safety Training
- Basic ropes, knots, and climbing equipment awareness with rappelling activity
- Fire Extinguisher User for Public and Businesses
- General Fire Safety

Email publicsafety@swtc.edu or call 608.822.2700 for more information.

Responsible Beverage Server

This course is designed for people wishing to become a bartender in the State of Wisconsin and is a requirement to obtain an operators license for selling alcohol beverages. It also meets training requirements for tobacco retailers. Students apply state laws and local ordinances relating to alcohol beverage service, identify the effects of alcohol and behaviors associated with impairments, describe ramifications of intoxication, and apply strategies to reduce potential liability. **Email publicsafety@swtc.edu or call 608.822.2700 for more information.**

Youth Tractor Safety Certification

This is a standard tractor certification course designed to fulfill the Wisconsin mandate that any youth under the age of 16 must complete a tractor and machinery certification course in order to operate agricultural machinery on public roads. This course will provide hands-on training and instruction in the following units: safety, instruments and controls, maintenance and safety checks, starting and stopping tractors, tractor safety on the farm, tractor hitches, PTO equipment, and a tractor driving skill test. Upon successfully completing a written and a tractor driving test, students will be issued a state certificate. Students over age 14 will be issued a federal certificate. Students under age 14 will be issued a federal certificate when they reach the age of 14. Students must be at least 12 years old. **Email gsnider@swtc.edu or call 608.822.2487 for more information.**

Outreach Centers

Southwest Tech offers Adult Basic Education courses, GED/HSED preparation, career planning services, and many other options at several outreach sites throughout Southwest Wisconsin. Many services are free of charge!

Boscobel

Library-Lower Level
1033 Wisconsin Ave.

MARLENE KLEIN
Adult Education Instructor
608.375.5873
mklein@swtc.edu

Darlington High School

11838 Center Hill Rd., Room 12

KALEE CRIST
Adult Education Instructor
608.822.2223

Dodgeville

Temporary Location
Dodgeville Family Chiropractic
1206 N. Johns Street

KATHY KORB
Adult Education Instructor
608.930.2878
kkorb@swtc.edu

Fennimore

Southwest Tech
1800 Bronson Boulevard
Knox Learning Center, Room 368

ROBIN DICKMAN
Adult Education Instructor
608.822.2633
rdickman@swtc.edu

KELLY MILLER
Adult Education Instructor
kmillers@swtc.edu

Platteville

150 East Pine Street

ANGELA GILLEN
Adult Education Instructor
608.822.2326
agillen@swtc.edu

EDWARD RINK
Adult Education Instructor
608.822.2424
erink@swtc.edu

BRENDA SCHWARZMANN
Adult Education Instructor
608.822.2355
bschwarzmann@swtc.edu

Prairie du Chien Memorial Library

125 S. Waucouta Avenue

WILLIAM HUSER
Adult Education Instructor
608.326.0718
whuser@swtc.edu

Richland Center

373 W. Sixth Street
608.822.2618

CINDY RASMUSSEN
Adult Education Instructor
608.822.2618
casmusse@swtc.edu

JERRY LYNCH
Adult Education Instructor
608.822.2636
jlynch@swtc.edu

KYLE BENNETT
ELL Instructor
608.822.2625
kbennett@swtc.edu

Course Descriptions

10-006-113 Precision Ag Technologies 3 Credits
Student will study fundamental processes of the Global Positioning System (GPS) with emphasis on its application to agricultural production. Technical aspects of the GPS satellites, differential correction, and hardware will be covered. The specific applications of the technology in agriculture for navigation, mapping, soil management, variable rate technology (VRT), and yield monitoring will be discussed and demonstrated by the student. Student will gain exposure to technology cost, and potential economic benefit of technology application. Student will also be introduced to the operation of Geographic Information Systems (GIS).

10-006-116 Introduction to Soils 3 Credits
Course is designed to provide the student with fundamental knowledge of soil and soil composition. Students will study soil types, formation factors, physical properties, biological properties and basic soil chemistry. Units covering tillage, conservation, pH and soil management will also be included. Students will gain the skills required to interpret soil survey maps and recognize qualities of various soil types. The student will perform soil sampling, residue measurements, compaction assessments and soil loss determinations per crop rotation guidelines.

10-006-117 Agribusiness Performance Standards 3 Credits
Course will provide students with ability to recognize and evaluate performance standards used in the agribusiness industry. Topics will include DOT regulations, legal descriptions, commodity marketing, contracts, financial statements and scorecards. Production standards will also be covered using industry benchmarks.

10-006-122 Pest Management 1 Credit
Students will learn the principles and methods used in the control of pests found on Golf Courses. Preparation for the Wisconsin Commercial Pesticide Applicator licensing will include restricted use regulations, applicator safety, environmental safety, equipment calibration, and production label interpretations. Course topics will include pesticide mode of action, interpretation of aerial photos, and integrated pest management practices (IPMs). During the course, students will complete that exam for licensing as a Wisconsin Commercial Pesticide Applicator for Golf Courses.

10-006-123 Artificial Insemination Training 1 Credit
This course is designed for the student wishing to learn artificial insemination of cattle as a career choice or to be used for personal farm purposes.

10-006-124 Pesticide Applicator Training 1 Credit
The learner will develop a strong understanding and basis of pest application training techniques, methods and standards used in the industry today. This class prepares students to take the Commercial Pesticide Applicator Certifying and Licensing exam category 1.1 Field and Vegetable Crops for the state of Wisconsin.

10-006-125 Crop Protection Products 2 Credits
Course provides information related to current products and practices used in protection of crops. Protection of crops both during the growing season and while in storage following harvest will be covered.

10-006-126 Pest ID & Mgt/Crop Scouting 3 Credits
The student will learn and develop skills, practices, and principles of identifying and managing pests that are a problem for a variety of common regionally grown agricultural crops. The student will learn control measures and application; proper use and safety measures; how to identify insects, weeds, and diseases in crops; various stages of growth related to timeliness of treatment; and methods of applying control measures. The student will learn principles to follow regarding the different ways of crop scouting.

10-006-127 Soil Fertility and Fertilizers 2 Credits
Course will cover the fundamental and applied principles and concepts of soil fertility and plant nutrition. Attention will be given to the nutrient requirements of the commonly produced agronomic crops of our area. Course will provide the student with the information necessary to plan and produce agronomic crops based on crop needs and available resources. Students will be able to interpret soil test reports and make recommendation based on given information for related crop plants. In-field activities will be used to effectively reinforce the material presented in class.

10-006-130 Row Crop Production Management 2 Credits
Course will provide the student knowledge necessary to plan, produce, protect, harvest, and store commodity row crops commonly produced in Wisconsin. Specific attention will be given to variety selection, seed bed preparation, fertilization, planting, weed control, insect control, disease control, harvesting, drying, and storing of crops. Late season field scouting will be covered. Harvest losses, yield determination, and Integrated Pest Mgt. will also be included. Commodity grading, sample collection, and the calibration of yield monitors will be covered. Field trips will be used to effectively reinforce the material presented in class. Students will demonstrate the ability to perform a crop profitability comparison.

10-006-131 Forage Crop Production Management 2 Credits
Course will provide the student knowledge necessary to plan, produce, protect, harvest, and store forage crops commonly produced in Wisconsin. Specific attention will be given to variety selection, seed bed preparation, fertilization, planting, weed control, insect control, disease control, harvesting, and storing of crops. Late season field scouting will be covered. Harvest losses, yield determination, and Integrated Pest Mgt. will also be included. Forage sample collection and quality grading standards will be covered. Field trips will be used to effectively reinforce the material presented in class. Students will demonstrate the ability to perform a crop profitability comparison.

10-006-132 Spatial Data Collection in Agriculture 2 Credits
Course will provide the student with skills related to the collection and processing of various types of spatial data in agriculture. Provides detailed instruction and hands-on use of GPS receivers and data loggers to collect field data. Units of study will include an appreciation for the value of data in decision making, operating a GIS (Geographic Information System) software, soil data, yield data, remote imagery and the equipment used to collect data. Students will generate geo-referenced maps using spatial data collected.

Prerequisite: Precision Ag Technologies (10-006-113)

10-006-133 Agribusiness Financial Management 3 Credits
This course will cover financial documents and practices as they relate to agribusinesses. Students will learn how agribusinesses use financial statements to analyze the financial health of a business. This course will give students a basic understanding of how to manage working capital and obtain financing.

10-006-134 Agricultural Equipment Management 3 Credits
Course will provide the student with the knowledge necessary to make decisions related to equipment management. Study will include equipment industry, power units, harvesting, and equipment management principles. A unit on equipment appraisal will be included, as will the operation of combine harvesting. Students will take part in activities off campus to reinforce classroom material. Labs will be used effectively to support information presented in lecture classes. Students will perform skills of equipment valuation, operation, and replacement strategies.

10-006-136 Agricultural Commodity Marketing 3 Credits
Operation and use of agricultural commodity markets and institutions as applied to enterprise and firm risk management. Cash markets; futures markets and futures option markets; basis; hedging and forward pricing; fundamental analysis; technical analysis and risk management strategies.

10-006-137 Agribusiness Marketing & Promotion 3 Credits
This course will apply principles of marketing to an agricultural business. Student will develop understanding and skills related to the relationship between a business and their customers. Units of study will include analyzing market potential, identifying target markets, evaluating market trends and understanding competitive behavior. Students will create a branding plan for a business and outline methods of connecting with the customer base. Also included will be a comprehensive overview of the food chain from producer to consumer, demographics, and consumer buying decisions. Factors impacting the international marketing of agricultural products will be studied.

10-006-144 Livestock Housing & Equipment 2 Credits
The student will have the opportunity to learn principles of designing correct facilities based on the environment, feeding system, waste removal systems, and factors which influence animal health. Students will compare and contrast various facilities as well as study building materials, design, layout and construction cost estimates. Additionally, students will identify requirements of a concentrated animal feeding operation permit. Students will complete a final project of designing the housing facilities for a livestock species of their choice.

10-006-146 Milk Production 3 Credits
Students study the value of milk in human nutrition, milk and health issues, the role of dairy cattle in the production of animal protein, physiology of lactation, milk composition, the effect of various feeds, milk testing, production records, recommended milking procedures in association with proper sanitation and prepping the cow, care and maintenance of equipment, mastitis and its relationship to profitability, use of laboratory culturing and sensitivity testing, study of computerized production records and their uses, as well as laws regulating milk production. Field trips will be utilized to view firsthand the topics studied in class.

10-006-147 Meat Quality 3 Credits
The students will study the importance of meat industry from the farm to the consumer. Students will be engaged in broad educational opportunities within the meat science industry for preparation in the world of work. Topics will range for live animal evaluation, transportation, safety aspects including regulations, inspection and laws surrounding handling animals, evisceration, wholesale and retail cuts, temperature and use of by products from the animal.

10-006-150 Farm Animal Reproduction 3 Credits
The student will learn the physiology and anatomy of the male and female reproductive tract of livestock. Also, covered in this course are hormones that effect the reproductive tract and the estrus cycle of the female. The student will become familiar with the reproductive disease of males and females. Finally an introduction to the common reproductive protocols and technology used within the industry.

10-006-151 Animal Selection & Improvement - Dairy 2 Credits
The student will gain fundamentals in genetics of livestock selection in this course. A historical perspective will be studied through Mendelian theory, followed by the study of current bull proving process. Mastery of the terminology and theory will be used for application of sire selection and dairy cattle evaluation. Genomics will also be used to apply current theories to dairy cattle selection.

10-006-152 Animal Selection & Improvement - Livestock 2 Credits
The student will become familiar with terminology, genetics, and selection of livestock that promotes high impact productive cattle and hogs. Basic study of genetics and genomics will be used to make selection and mating decisions that will improve performance of livestock. A variety of classroom activities and field trips will be used to achieve the objectives of this class.

10-006-153 Dairy Production Management 3 Credits
The student will study a variety of topics relevant to the dairy industry for the present and future planning of the industry. An overview of all aspects of the dairy industry ranging from health, nutrition, production, management practices, technology, reproductive, economics, food safety, contracts and employability opportunities. The continued important topic and animal welfare will be addressed. The course will be thoughtful engaging for those learners who have a strong desire for employment and those who have interests in farming.

10-006-157 Livestock Production Management 3 Credits
The student will study a variety of topics relevant to the livestock (beef, swine, and small ruminants) industry for the present and future planning of the industry. An overview of all aspects of the livestock industry ranging from health, nutrition, production, management practices, technology, reproductive, economics, food safety, contracts and employability opportunities. The continued important topic and animal welfare will be addressed. The course will be thoughtful engaging for those learners who have a strong desire for employment and those who have interests in farming.

10-006-158 Ration Balancing & Formulation 2 Credits
Students study the recommended practices, care and feeding of the dairy, beef, sheep, goats and swine through computer balancing of rations. Also included is a review of the macronutrients and the study of micronutrients, metabolic disorders, their symptoms, causes, prevention, and treatments. Field trips will be utilized to emphasize recommended feeding practices with various feeding systems.

10-006-159 Agribusiness Computer Applications 1 Credit
Students will construct, manipulate, and select spreadsheets and documents for various situations in the agriculture industry and on a farm. Data gathering agriculture software will be introduced to demonstrate its use in making management decisions. The use of email features used in business will be explored.

Corequisite:
Beginning Microsoft Excel (10-103-106)

10-006-160 Plant Science 3 Credits
Provides fundamental knowledge of plant components and their functions. Topics include pollinating and propagating plants, germinating seeds, plant nutrients, and factors affecting photosynthesis, respiration, and transpiration. Participants will experience plant components and their functions through the completion of hands-on activities.

10-006-161 Career Development in Agriculture 1 Credit
The student will develop individual leadership and employment qualities, in addition to exploring the agricultural industry and available careers.

10-006-162 Agribusiness Operations 3 Credits
Students will develop skills in understanding the agribusiness industry and the operational responsibilities of a business. Studies will include the role of management, forecasting, budgeting and the marketing approach to customer satisfaction. Students will develop a business plan for an agricultural related business.

10-006-163 Agribusiness Management 3 Credits
This course will offer the student the opportunity to become familiar with the current trends and practices used in the management of Agricultural businesses. Topics of study will include an overview of the food and fiber system, business organizations, role of management, marketing, forecasting, long range planning, personnel management and strategies of business competitiveness. Student will develop skills in assessing business performance.

10-006-164 Agriculture Law 3 Credits
Students will acquire skills needed to be in compliance with laws regulating the industry of agriculture. Units of study will include: transportation, legal descriptions, USDA and WDACTP regulations, agricultural contracts and others rules pertaining to the operation of an agribusiness.

10-006-167 Agriculture Risk Management 3 Credits
The profitable operation of business is foundational to the sustainability of that business. Students will develop strategies to ensure that the risk associated with the operation of an agribusiness is managed. Studies will include financial health and ratios, taxation, depreciation schedules, and making producer recommendations.

10-006-180 Animal Science 3 Credits
This course provides fundamental knowledge of the animal science field. Topics include animal health, animal environments, anatomy and physiology, genetics and reproduction, animal feedstuffs, and job related safety. Participants will experience animal concepts through the completion of hands-on activities.

10-006-197 Agribusiness Experiential Learning 3 Credits
The student will have the opportunity to apply course work to a practical, on-the-job situation. Goals, competencies and core abilities are followed.

Prerequisites:
Agribusiness Financial Management 10-006-133) or
Introduction to Animal Health (10-080-118) or
Pest ID & Mgt/Crop Scouting (10-006-126) or
Legal Aspects of Agribusiness (10-006-114) or
Farm Animal Reproduction (10-006-150)

10-070-101 Field Application Equipment 2 Credits
Students learn to operate, recondition and maintain field application equipment such as manure spreaders, fertilizer spreaders and field sprayers used on modern farms and cooperatives. Students learn calibration procedures for liquid and dry fertilizer applicators. They will learn common terminology used when working with control monitors and associated equipment.

10-070-104 Ag Safety, Electrical & Maintenance 2 Credits
Students will learn skills necessary to help them make general repairs and identify proactive maintenance steps of all types of equipment throughout a farmstead. Safety while performing daily tasks will be included in every unit. Emphasis areas include selecting personal protective equipment, working around cattle, crop storage, farm chemicals and fluids storage, safety awareness of electrical systems both on equipment and around the farmstead, selecting proper tools to perform maintenance procedures, and ATV safety. Students will gain an understanding of viewing the farmstead with a safety focus to recognize farm hazards and being aware of corrective measures that are needed to make the farmstead safe for all personnel on the farm.

10-080-117 Animal Nutrition & Ration Balancing 4 Credits
Students will study the digestive systems and nutritional needs of livestock and dairy animals. Identification of feedstuffs and regulations on livestock feeding will be explored. Students will read, interpret, and make recommendations on feed test reports and tags. They will also learn to read rations and mix sheets, along with the formulation and balancing of rations using computer-based software.

10-080-118 Introduction to Animal Health 3 Credits
This class is designed to introduce the student to the study of farm animal health. During this course students will study animal anatomy, basic immune system function and common diseases (causes, treatments and prevention). They will become familiar with genetic abnormalities and animal behavior. Finally, the student should gain a grasp of the uses of antibiotics, vaccines and hormones.

10-080-119 Livestock Housing & Equipment 3 Credits
The student will have the opportunity to learn principles of designing correct facilities based on the environment, feeding system, waste removal systems, and factors which influence animal health. Students will compare and contrast various facilities as well as study building materials, design, layout and construction cost estimates. Additionally, students will identify requirements of a concentrated animal feeding operation permit. Students will complete a final project of designing the housing facilities for a livestock species of their choice.

10-080-120 Animal Genetics 3 Credits
The student will gain fundamentals in genetics of farm animals in this course. A historical perspective will be studied through Mendelian theory, followed by the study of current bull proving processes. Mastery of the terminology and theory will be used for application of sire selection and animal evaluation. Genomics will also be used to apply current theories in farm animal selection.

10-082-101 Automation in Agriculture 3 Credits
Provides an overview of automation in agriculture and introduces the tools used. Trends and opportunities within the area of automation will be explored. Focus will be on robotics, data collection, animal health monitoring systems, and automated environments.

10-090-101 Beginning Farm Management 3 Credits
Students will study topics such as business planning, recordkeeping, financial statements, crop planning, livestock management, human resource management, marketing management and risk management. In addition, the course includes time to work with students on transition planning with owner generation, drafting operating agreements, financial statements, loan application preparation, livestock housing design, crop scouting, feed inventory calculations, nutrient management planning, and computerized recordkeeping training.

10-093-101 Plant and Soil Science 3 Credits
Course is designed to provide the student with fundamental knowledge of soil, soil composition and plant components and their function. Students will build their knowledge on the physical and biological properties of soil and soil fertility, along with the factors that influence seed germination, plant growth and reproduction. Students will gain additional knowledge through hands-on experience in the classroom and out in the field.

10-093-102 Grain Production & Management 3 Credits
Course will provide students with knowledge necessary to plan, produce, protect, harvest, and store commodity crops commonly produced in Wisconsin. Students will gain a basic understanding of how livestock production utilizes these commodities. The course will also introduce technology related to the advanced production of commodity crops. Students will gain experience with grain production and management through hands-on labs, field trips, and through real world in-the-field scenarios.

10-093-103 Forage Production & Management 3 Credits
Course will provide students with knowledge necessary to plan, produce, protect, harvest, and store forage crops commonly produced in Wisconsin for livestock production. Students will gain a basic understanding of how livestock production utilizes these forages. The course will also introduce technology related to the advanced production and management of forage crops. Students will gain experience with forage production and management through hands-on labs, field trips, and through real world in-the-field scenarios.

10-093-104 Applications of GIS in Agriculture 2 Credits
Course will offer students the ability to build skills relating to Agronomic Geographic Information System (GIS) and on farm applications. Students will be able to advance their digital farming skills by learning how to adapt to different seasonal variables, monitor the health of individual crops, estimate yields from a given field, and maximize crop production. The course will have the opportunity for students to gain experience with new technology related to soil management, ag equipment, and unmanned aerial systems. Students will gain further experience through hands-on labs, field trips, and through real world in-the-field scenarios.

10-093-105 Nutrient Management & Precision Planning 3 Credits
Course will provide students with knowledge necessary to plan, apply, and manage plant nutrients while building an understanding of the regenerative principals of nutrient management. Students will gain a basic understanding of how Wisconsin's 590 standard is built and implemented for on-farm practices. The course will also introduce technology that aids in the guidance and implementation of nutrient application, management, and precision planning. Students will gain experience through hands-on labs, field trips, and through real world in-the-field scenarios.

Prerequisite:
Introduction to Soils (10-006-116)

10-093-106 Crop Production & Management 3 Credits
Course will provide students with knowledge necessary to plan, produce, protect, harvest, and store grain and forage crops commonly produced in Wisconsin. Students will gain a basic understanding of the relationships involved with producing quality gain and forage for livestock production. The course will also introduce technology related to the advancement of the production and management of grain and forage crops. Students will gain experience with forage production and management through hands-on labs, field trips, and through real world in-the-field scenarios.

10-101-101 Accounting 1, Part 1 2 Credits
Students obtain a basic understanding of accounting principles and procedures. Emphasis will be given to journals, ledgers, accounts, terms, and systems used by accounting personnel.

10-101-102 Accounting I, Part 2 3 Credits
Students will continue the study of introductory accounting. The area of accounting systems is studied, looking at more specific topics and how they relate to accounting principles.

Prerequisite:
Accounting 1, Part 1 (10-101-101)

10-101-111 Accounting 1 4 Credits Credits Credits
Students learn accounting concepts and principles in a logical step-by-step manner. Students will do extensive problem work. Students focus on accounting for both service and merchandising businesses.

10-101-112 Accounting 2 4 Credits
Students expand upon basic accounting concepts and principles developed in Accounting I and relate them to the accounting for notes receivable, fixed assets, investments, liabilities, partnerships, limited liability companies, and corporations. Students will learn to prepare the statement of cash flows and perform financial statement analysis.

Prerequisite:
Accounting 1 (10-101-111) OR
Accounting 1, Part 2, (10-101-102)

10-101-113 Accounting 3 4 Credits
Students study the three main financial statements in detail. Students review and expand upon generally accepted accounting principles as they apply to revenue recognition and current assets. Students perform extensive problem solving to provide a practical application of accounting concepts.

Prerequisite:
Accounting 2 (10-101-112)

10-101-114 Accounting 4 4 Credits
Students study the noncurrent asset, liability, and stockholders' equity sections of the balance sheet. Students complete a comprehensive practice set to further develop an understanding of financial accounting concepts.

Pre-requisite: Accounting 2 (10-101-112)

10-101-116 Cost Accounting 3 Credits
Students learn accounting principles associated with manufacturing, including job order, process, and standard costing. Also, students study special problem areas such as scrap, lost or gained units, joint products, and by-products. In addition, the students use spreadsheet software to prepare manufacturing statements and perform required calculations.

Prerequisite:
Accounting 2 (10-101-112)

10-101-117 Taxes 1 3 Credits
Students learn basic federal and state tax law as it relates to individuals, including learning to research technical topics and use tax resource materials. Students will apply their knowledge by preparing tax returns using both manual and computerized preparation methods.

10-101-118 Taxes 2 3 Credits
Students learn basic federal, state, and local tax law as it relates to corporations, partnerships, estates, trusts, and exempt organizations. Students will learn to apply their knowledge by preparing tax returns using both manual and computerized preparation methods.

10-101-121 Advanced Accounting Spreadsheets 3 Credits
Students will plan, create, format, and modify Microsoft Excel worksheets for accounting applications. Students will use the software to apply mathematical and statistical commands, apply functions, and create and modify pivot tables, and graphs.

Pre-requisites: Beginning Microsoft Excel (10-103-106)
Co-requisite: Accounting 2 (10-101-112)

10-101-123 Payroll Applications 2 Credits
Students identify federal and state laws affecting payroll, and determine coverage for FICA, federal and state income tax, and unemployment taxes. Students complete payroll tax forms, journal entries, and a comprehensive practice set.

Prerequisites:
Accounting 1 (10-101-111) or
Accounting 1, Part 1 (10-101-101)

10-101-124 Accounting Systems and Procedures 3 Credits
The learner will examine the systems development life cycle including systems principles and internal controls. They will then apply these principles and controls to various systems analysis, designs, and implementation projects.

Pre-requisites:
Accounting 2 (10-101-112)
Beginning Microsoft Excel (10-103-106)

10-101-125 Managerial Accounting 3 Credits
The learner will analyze financial performance, evaluate capital budget investments, compare capital structures, prepare a master budget, develop a working capital management strategy, evaluate long term financing alternatives, and analyze the effect of international exchange rates on financial decisions.

Prerequisites:
Math of Finance (10-804-144) OR
Math with Business Applications (10-804-123)

10-101-127 QuickBooks **1 Credit**
Students develop a basic understanding of a computerized accounting system while working with QuickBooks Pro accounting software. Students will set up service and merchandising businesses, record customer, vendor, inventory, general ledger, and payroll transactions, and generate financial reports. It is highly recommended that students have taken Accounting 1 Part 1 (10-101-101) or Accounting 1 (10-101-111) in order to be successful in this class.

10-102-104 Principles of Finance **3 Credits**
Students apply decision-making strategies such as short-term and long-term financing and investing, leverage, break-even analysis, and time value of money. Financial markets and institutions are discussed in length as well. The relationship between risk and return is emphasized throughout the course.

Prerequisite:
Accounting 1 (10-101-111) OR
Accounting 1 Part 1 (10-101-101) AND
Accounting 1 Part 2 (10-101-102)

10-102-105 Introduction to Business **3 Credits**
Students gain an overview of the business enterprise in the American economy. Studies focus on the interrelationships between business functions and the economy by examining such topics as ownership forms, marketing, management, the legal environment of business, and management information systems.

10-102-109 Business Law I **3 Credits**
Students explore the United States legal system, apply common law contract principles to everyday business transactions, and the Uniform Commercial Code to the formation of sales contracts, transfer of title and risk, performance and product liability.

10-102-110 Business Law 2 **3 Credits**
Students learn legal principles applicable to agency and employment relations and explore the effect of government regulations on business enterprises; learn the basic legal concepts of secured transactions, bankruptcy, and alternatives to bankruptcy; and apply the Uniform Commercial Code to the issuance and transfer of negotiable instruments.

Prerequisite:
Business Law 1 (10-102-109)

10-102-115 Business Management Strategies **3 Credits**
Students explore the activities undertaken by the management and leadership of a business organization. Students will apply problem-solving and decision-making skills to situations that affect business operations. The course will focus on the integration of the functions of finance, marketing, operations, technology, and human relations in the process of managing a firm.

Prerequisite:
Accounting 1 (10-101-111)

10-102-129 Human Resources Management **3 Credits**
Students will explore the people dimension of organizations; one of the most challenging aspects of management. Students will develop skills in the processes employed by human resource professionals to ensure employee's abilities are used effectively and efficiently to achieve an organization's goals. The impact of laws and of societal and business trends on human resource functions will be analyzed.

10-102-130 Management Principles **3 Credits**
Students explore the challenges faced by the managers of organizations in today's competitive business environment. Students will examine managerial roles and skills as important factors in determining organizational performance. These factors include planning for the future by anticipating changes in the external environment, organizing people into groups, allocating resources to them and motivating them to attain organizational goals.

10-102-131 Developing a Business Plan **1 Credit**
Every new business faces challenges. A good business plan provides an objective look at the big picture issues for the potential business venture. Students will complete a business plan for their business concept in this course. Students will evaluate their business concept and develop the marketing, operations, and financial components for this concept.

10-102-132 Operations Management **3 Credits**
Students will apply decision-making techniques to ensure efficient and competitive management of business operations. Students will focus on the key operational activities of product development, process design and management, and supply chain management. Course topics will include product design processes, quality, facility design and capacity planning, inventory control, project management, supply chain management, cost control, and customer service management.

Prerequisite:
Introduction to Business (10-102-105)

10-102-133 Career Planning in Business **1 Credit**
Students will develop strategies to secure employment and make career decisions. Topics include: career research, goal setting, preparation of employment-related correspondence, professional profile development, and effective employment interviewing skills.

10-102-151 Personal Finance **1 Credit**
This course will help students with the process of making informed financial decisions. Students will explore money management techniques, credit options, insurance, saving and investing, and retirement plans.

10-102-152 Data Analytics 1 **3 Credits**
In this course, the learner will learn the basic concepts of data analysis and how they are used to drive business processes. The learner will identify and retrieve relevant data sources, and to prepare data for analysis with pre-configured and custom tools. Upon completion of this course, the learner will be able to prepare data for further analysis to drive decision making for business.

10-102-153 Elicitation & Coll Techniques **3 Credits**
The learner will learn the ability to define stakeholders and use the stakeholder analysis to conduct elicitation activities accurately capturing information needs, documenting and confirming results. Facilitates meetings and communication plan to support ongoing collaboration.

10-102-154 Databases **3 Credits**
In this course, the learner will explore concepts, design, documentation, and implementation of various database systems, including proprietary and open source technologies. The learner will implement Structured Query Language (SQL) to store, retrieve, and manipulate data. The learner will create queries, normalize database structures, and create stored procedures. Upon completion of this course, the learner will be prepared to develop and maintain databases used in application development.

10-102-155 Business Intelligence and Visualization **3 Credits**
In this course, the learner will learn to organize, manage, and analyze very large data sets from various sources. The learner will use software tools to present complex data in visually meaningful representations that can be communicated to business stakeholders. Upon completion, the learner will learn how to transform raw data into meaningful information that will be utilized for data-driven decision making.

10-102-156 Ethics in Data Analytics **3 Credits**
In this course, the learner will discover the risks, challenges, and opportunities data presents to the greater good. It will cover the moral implications of concepts such as social marketing, fraud, risk management, and data privacy. Upon completion the learner will be able to evaluate risks and results of data utilization, anticipate the shifts and safeguards in the industry, and assess the company's rights and responsibilities in data collection and usage.

10-102-157 Data Analytics 2 3 Credits

In this course, the learner will build upon the skills learned in Data Analytics 1. The learner will work with large data sets and organize that information for effective data analysis. The learner will utilize commercial data analysis software packages, and create custom computer programs to analyze data. Upon completion of the course, the learner will be able to perform analysis of relevant data with various software tools, and use the generated information to help make informed business decisions.

Co-requisite:

Data Analytics 1 (10-102-152)

10-102-158 Business Analytics & Insights 3 Credits

The learner will learn to prioritize and trace requirements, organize large amounts of data, understand and model requirements using various analysis techniques; verify, validate and communicate the requirements.

10-102-160 Software Applications 3 Credits

The learner will learn to use BA software tools- Visio, Sharepoint, OneNote, and advanced Excel involving scenarios and case studies.

10-102-161 Strategy Analysis & Evaluation 3 Credits

The learner will identify and define business needs; understand business structure, strategy, and impact of work efforts; define the importance of vision, strategy, goals and objectives; and define solution scope. Effectively facilitate change management.

Pre-requisite:

Business Intelligence and Visualization (10-102-155)

10-102-162 Programming in Data Analytics 3 Credits

In this course, the learner will investigate the fundamentals of computer programming using the Python and/or R programming language. The learner will examine data types, variables, conditional statements, looping, array structures, and structured programming techniques. Upon completion of the course, the learner will be able to use Python and/or R to apply problem-solving skills to create applications for delivery to various platforms.

10-102-163 Data Analytics Career Experience (Internship) 2 Credits

Students will obtain practical, hands-on experience while applying skills developed in the Data Analytics program at an approved site with employer and instructor supervision. Professional behavior, good communication, and positive interpersonal skills will also be demonstrated.

10-103-105 Beginning Microsoft Word 1 Credit

This course is an introduction to Microsoft Word. Students will create, edit, and format documents while using the built-in proofing tools. Other topic areas covered include text, paragraph, & document formatting as well as working with graphics in documents. Basic experience with Windows is assumed.

10-103-106 Beginning Microsoft Excel 1 Credit

This course is an introduction to Microsoft Excel. Students will learn the basic features to produce basic worksheets and charts. Other topic areas covered include formatting, formulas, built-in functions used to design functional worksheets to solve business problems. Basic experience with Windows is assumed.

10-103-111 Beginning Microsoft Access 1 Credit

This course is an introduction to Microsoft Access. In the four assigned units, you will learn the purpose and business use for a database, database terminology, and how to create and work with Access tables, queries, forms, and reports. Basic experience with Windows is assumed.

10-103-117 Intermediate Microsoft Word 1 Credit

This course introduces intermediate level features of Microsoft Word. Students will learn to create multi-page documents containing tables, charts, SmartArt images, and WordArt. Other topic areas covered include the use of headers, footers, styles & themes.

10-103-118 Intermediate Microsoft Excel 1 Credit

This course introduces intermediate level features of Microsoft Excel. Students will learn to use relative & absolute reference formulas and functions, manage workbooks using multiple worksheets, create custom templates and use pivot tables effectively.

10-103-129 Intermediate Microsoft Access 1 Credit

Students will learn intermediate to advanced features of Microsoft Access. In the four units assigned, the student will work with multi-table, summary, and cross-tab queries. Calculated fields will be introduced as well as PivotTables and PivotCharts. Students will modify forms, import/export data and repair a database. Basic experience with Windows is assumed.

10-103-134 Introduction to Microsoft Publisher 1 Credit

Students will learn the features of Microsoft Publisher. Skills in the use of this software will be developed through the use of numerous business related applications. Basic experience with Windows is assumed.

10-103-139 Beginning Keyboarding Software 1 Credit

Students will learn and practice correct alphabetic & numeric keyboarding techniques and build basic speed and accuracy while utilizing keyboarding software.

10-103-140 Windows 7 1 Credit

Students will learn Microsoft Windows 7 concepts and terminology. Students learn how to use the mouse, resize and scroll windows, work with icons and groups, and use menus and dialog boxes. They also learn how to use My Computer and Windows Explorer.

10-104-105 Selling Principles 3 Credits

Philosophy of personal selling is introduced through learning to understand the societal role of salespersons and the human behaviors of customers, as well as how to sell ideas, services, and products. Students prepare sales presentations and practice selling techniques.

10-104-130 Marketing Principles 3 Credits

Students will use the marketing mix in developing marketing concepts. Global, relationships, ethics, customer value, productivity, and technology perspectives to marketing will be developed by the student.

10-107-189 IT Career Development 1 Credit

Students will learn job seeking skills and practice appropriate work environment attitudes while projecting a professional image. Students will build a job interview portfolio, participate in mock interviews, and be required to research a particular job and company. Final versions of resumes, cover letters, and follow-up letters will be required. Common interviewing and communication skills required for the IT professional will also be addressed.

10-107-191 IT Concepts 2 Credits

Learners will utilize a Raspberry Pi, an inexpensive credit card-sized single-board computer, to explore information systems, operating system management, GUI, and command-line interfaces, hardware components, and use of file systems, files and file attributes and data communications. Learners will also be introduced to the many career opportunities in the Information Technology profession which employs over 6 million individuals across a range of industries, from manufacturing, banking and finance, transportation, healthcare and education.

10-107-192 IT Career Development 2 Credits

Students will prepare final versions of employment-related documents including resumes, cover letters, follow-up letters, and job applications. Students will build an online career portfolio (LinkedIn) and will participate in mock interviews and job shadowing with an IT professional. Students will learn job seeking skills and practice appropriate work environment attitudes while projecting a professional image. Communication skills required for an IT professional will also be addressed.

10-109-101 Introduction to Tourism **3 Credits**
Introduces new students to the broad spectrum of the leisure services industry. Typical career areas include food service, lodging, travel/tourism, and recreation. The course explores educational options and program career opportunities as well as historical and operational perspectives of the career areas mentioned.

10-109-102 Hospitality Professional Devel Seminar **1 Credit**
Students will learn the challenges and opportunities in various careers in the hospitality and tourism industry.

10-109-103 Event Management **3 Credits**
Students will learn to create, plan, organize and execute events related to the hospitality and tourism industry. Emphasis will be placed on events in the resort, food service and golf areas. The students will focus on design, internal management and post event evaluation of each event.

10-109-104 Hospitality Marketing **3 Credits**
Students will learn to develop and analyze marketing strategies, sales techniques, promotional tools, and market research for the hospitality and tourism industry.

10-109-105 Hospitality Law **3 Credits**
Students explore the legal liabilities of the hospitality and tourism industry and apply legal principles using case studies. Special consideration is given to legal issues in the culinary, resort and golf industries.

10-109-106 Hospitality Food Sanitation & Safety I **2 Credits**
Students study the conditions which cause food contamination and spoilage, safe food handling techniques, and how to prevent accidents. Students use state and federal regulations, apply HACCP principles, and complete the Wisconsin Certified Food Manager exam.

10-109-108 Hospitality Supervision **3 Credits**
Students investigate procedures involved in hiring and supervising personnel including relevant laws, types of communication, training employees, goal setting and professional interactions. Special emphasis is given to the hospitality, tourism and golf industries.

10-150-102 Cisco Networking **4 Credits**
The learner will explore physical components of communication networks in great detail, including use, maintenance, and connectivity. Learners will configure TCP/IP protocols on Cisco routers and switches, as well as various testing equipment. Learners will apply advanced troubleshooting concepts on communication networks. Learners will configure routing and bridging protocols along with advanced IP configurations in order to further understand communication systems, procedures, and use policies. Learners will implement basic network security and network design with VLANs and ACLs. The learner will be introduced to all of the objectives of the Cisco CCNA industry certification exam.

Prerequisite:
Introduction to Networks (10-150-129)

10-150-103 Firewall/VPN **3 Credits**
Learners will examine the historic roots of lean and its current application in manufacturing, service sector, health care, and government. Learners will internalize the five principles and identify non-value added activities in a process. Learners will explore the characteristics of an organizational culture necessary to support and sustain a lean enterprise.

Pre-requisite:
10-150-102 Cisco Networking

10-150-105 Advanced Communication Networks **3 Credits**
Learners will work with advanced communication networks implementing various wireless and Wide Area Networks (WANs). Learners will also implement multiple collaboration systems, including email and instant messaging systems as well as Intra/Internet web services on both Windows and Linux operating systems.

Prerequisite:
Cisco Networking (10-150-102)

10-150-107 Internship/Field Study **3 Credits**
Students will obtain on-the-job experience in an information technology department. The individual student will work in an area of information systems that parallels the student's area of concentration.

Prerequisites:
Cisco Networking (10-150-102) AND
Windows Server Administration (10-150-128) OR
Windows Server Administration (10-150-135)

10-150-108 Advanced IT Help Desk **3 Credits**
Students will demonstrate acquired skills by participating in the student-run help desk at SWTC. Students will be required to mentor support technicians, schedule jobs, document steps taken and services performed, open tickets as well as review closed tickets under the supervision of an IT instructor. Students will work with the public and other students four (4) hours per week for the entire semester.

Prerequisites:
Comp TIA A+ Essentials (10-154-101)
Comp TIA A+ Practical Applications (10-154-106)
Cisco Networking (10-150-102), AND
IT Help Desk Practicum (10-154-108) OR
IT Help Desk Fundamentals (10-154-109)

10-150-115 Principles of Information Security **3 Credits**
The learner will have the working knowledge and skills required to identify risk and participate in risk mitigation activities, provide infrastructure, application, operational and information security, apply security controls to maintain confidentiality, integrity and availability. They will also identify appropriate technologies, products, and operate with an awareness of applicable policies, laws and regulations. These skills will prepare the learner for the CompTIA Security+ Certification examination, which is approved by the Department of Defense to meet IAT Level II and IAM Level I requirements as defined in DoD 8570.01-M.

Prerequisites:
Comp TIA A+ Essentials (10-154-101)

10-150-121 VMWare VCP Essentials **3 Credits**
This hands-on training course allows the learner to explore installation, configuration, and management of VMware® vSphere, which consists of VMware ESXi/ESX and VMware vCenter Server. Students are introduced to virtualization and storage management concepts using VMware server virtualization products. The learner will be introduced to all the objectives for the VMware VCP industry certification exam.

Prerequisite:
Cisco Networking and Security (10-151-103) OR
Cisco Networking (10-150-102)

10-150-126 Premises Cabling Technician **2 Credits**
This course will introduce the learner to the knowledge and skills required in the installation of copper, fiber and wireless networks. An exploration of cabling types, termination techniques, design and testing will be conducted. Learners will practice using the tools and the skills required to terminate copper, fiber and wireless. At the completion of this course, the learner will complete the requirements for the CPCT certification with a written and hands-on examination.

10-150-129 Introduction to Networks 2 Credits
Learners will install, operate, configure, secure and troubleshoot networks. This is an entry-level networking course that learners will explore the fundamentals of LAN and WAN technologies including routing, switching and wireless. Learners will work directly with Cisco routers and switches configuring IPv4 and IPv6 by implementing switched networks using VLANs, Access Control Lists (ACLs) and routing technologies.

10-150-130 Linux Essentials 2 Credits
The learner will practice the fundamentals of the Linux operating system and command line, and basic open source concepts. Learners will be able to comprehend how Linux is used and the basics of the command line. The learner will also apply troubleshooting skills using the built-in Linux command line help. This course builds the foundational knowledge for progressively mastering the manipulation of Linux file systems, scripting, and security. The learner will be introduced to all of the objectives of the LPI Linux Essentials industry certification exam.

10-150-131 Mac OS Essentials 1 Credit
The learner will be introduced to the skills, knowledge, and tools to support and maintain the users of a Mac Operating System connected to a network. The learner will explore Mac OS features and functionality, including how to find more information about the Mac OS. Troubleshooting the Mac OS will also be a skill introduced in this course.

10-150-132 Voice Over IP Administration 2 Credits
Learners will be introduced to the protocols, terms and definitions of analog phone systems as well as Voice over IP (VOIP) networks. Learners will be configuring station call features, provisioning voice trunks, and establishing voicemail accounts. The learner will use the Cisco Unified Communications Manager platform while exploring the functionality of a voice over IP network.

Prerequisite:
Introduction to Networks (10-150-129)

10-150-133 Wireless Networking 2 Credits
The learner will be introduced to the design, planning, implementation, operation and troubleshooting of Wireless Networking. The course will provide a comprehensive overview of technologies, security, and design best practices. The learner will conduct hands-on installations and configurations of Wireless Client Adapters, Routers, Access Points, Repeaters, Bridges and other wireless devices using multiple-vendor equipment.

Prerequisites:
Cisco Networking (10-150-102)

10-150-134 Windows Support 1 Credit
This course will introduce the learner to a Microsoft Windows client-server environment including automated administrative tasks using PowerShell, ADDS account management, introduction to group policy, Windows deployment and remote administration tasks. Learners will demonstrate acquired skills in a simulated enterprise environment.

10-150-135 Windows Server Administration (2 cr) 2 Credits
This course will focus on planning, implementing, and managing the core infrastructure of a Windows client-server environment using the latest Windows server technology. Learners will work with on-premises Active Directory and Azure IaaS (Azure AD), network access and data security, Group Policy and Remote Access services. At the completion of this course, the learner will demonstrate their skills by implementing a simulated enterprise environment.

Prerequisites:
Introduction to Networks (10-150-129) AND
Windows Support (10-150-134)

10-150-136 Cloud Computing 2 Credits
In this course, the learner will be introduced to cloud fluency exploring the latest cloud services available from providers such as Amazon, Google, and Microsoft. Learners will implement and manage a working compute and storage environment using the three cloud providers. At the completion of this course, the learner will demonstrate their skills by implementing cloud-based services for an enterprise environment.

Prerequisite: Windows Support (10-150-134)

10-150-154 Firewall/VPN Technologies 2 Credits
Learners will participate in hands-on, career-oriented learning solutions focused on network devices designed to mitigate security threats. Learners will apply mitigation techniques like IDS/IPS, virtual private networks and various firewall technologies.

Prerequisite:
Cisco Networking and Security (10-151-103)

10-151-101 Introduction to Security 1 Credit
Learners will explore the importance of the field of cybersecurity, data confidentiality, and best practices for using the Internet and social media. The learner will have hands-on experience with cyber trends, threats and staying safe in cyberspace, protecting personal and company data. Learners will also explore career opportunities in the field of cybersecurity.

10-151-102 Cybersecurity Essentials 2 Credits
Learners will explore the characteristics and tactics used by cyber criminals in today's connected world. Learners will then delve into the technologies, products, and procedures cybersecurity professionals use to combat cybercrime. Hands-on labs exploring the topics of this course will be used throughout the course.

Prerequisite:
Introduction to Networks (10-150-129)

10-151-103 Cisco Networking and Security 3 Credits
Learners in this course are exposed to the foundational knowledge required to respond to network security threats through various threat mitigation measures. Learners will configure and monitor various network devices in order to harden to protect data assets and network systems from attack.

Prerequisite:
Introduction to Networks (10-150-129)

10-151-104 Linux Administration and Security 3 Credits
Learners will gain an understanding of the fundamentals of the Linux operating system, system architecture, installation, command line and file system. This course implements a practice as you read approach to learning. Each learner has hands-on access to a Linux virtual machine to practice, explore and trial Linux command line concepts while reading course content. This course is aligned to the LPI LPIC-1 101 certification exam.

10-151-105 Wireless Networking and Security 2 Credits
The learner will be introduced to the design, implementation, operation, security and troubleshooting of wireless networking. The course will provide a comprehensive overview of technologies, security, and best practices. The learner will conduct hands-on installations and configurations of Wireless Client Adapters, Routers, Access Points, Repeaters, Bridges and other wireless devices using multiple-vendor equipment.

Prerequisite:
Introduction to Networks (10-150-129)

10-151-106 Scripting for Security 2 Credits

Learners will start out with hands-on labs working with Linux, Python programming and Bash scripting. The learner will then focus on developing scripts that could be used for security testing, data analysis or other routine tasks for a cybersecurity professional.

Prerequisite:

Linux Administration and Security (10-151-104)

10-151-107 Cybersecurity Operations 3 Credits

Learners in this course are exposed to all of the foundational knowledge required to detect, analyze, and escalate basic cybersecurity threats using common open-source tools. The learner will complete hands-on labs to develop skills related to security monitoring, host-based analysis, network intrusion analysis, and security policies and procedures. This course aligns with the Cisco Certified CyberOps Associate (CBROPS) certification.

Prerequisites:

Introduction to Networks (10-150-129)

10-151-108 Database Security Administration 3 Credits

The learner will be introduced to the collection of processes and procedures used to protect and secure a database from illegitimate activity and use, malicious threats, and attacks. This course will start with basic SQL and Oracle database administration and architecture, then explore common database vulnerabilities and methods to protect and secure.

Prerequisite:

Linux Administration and Security (10-151-104)

10-151-109 Advanced Security Capstone 3 Credits

Learners will be implementing various advanced secured wired and wireless systems with Intra/Internet services on both Windows and Linux operating systems. At the completion of this course, the learners will have an enterprise-level secured network infrastructure connected directly to the Internet.

Prerequisite:

Cisco Networking and Security (10-151-103)

10-151-110 Network Defense & Forensics 3 Credits

Learners are introduced to the NIST NICE CyberSecurity Workforce Framework, which is focused on the identification, analysis, and mitigation of threats to internal IT systems or networks. Learners will conduct hands-on labs that enforce knowledge within computer network defense analysis, incident response, vulnerability assessment and management, and computer network defense infrastructure support.

Prerequisite:

Cybersecurity Essentials (10-151-102)

10-151-111 Offensive Security Operations 1 Credit

Learners are armed with the crucial knowledge they need to intelligently discuss and evaluate, at a basic level, the security environment for a given business context. Learners will perform threat modeling activities to evaluate physical, communication, and application security vulnerabilities and recommend threat mitigation measures. A CTF-like IoT Security vulnerability challenge with 10 missions will be the final assessment.

Prerequisite:

Cybersecurity Essentials (10-151-102)

10-152-116 HTML & CSS 3 Credits

Students will learn the fundamentals and techniques of developing websites using XHTML/CSS. Topics include common HTML tags, tables, linking, image manipulation, forms, and cascading style sheets (CSS). Topics include HTML 5 and CSS 3.

10-154-101 Comp TIA A+ Essentials 2 Credits

Students will develop required skills and techniques that meet the competencies in the six domains required to pass the industry certification exam. Students will learn a technical understanding of computer technology and hardware, troubleshooting/repair/maintenance, operating systems, networking, security, and operational procedures including communication skills and professionalism required of all entry-level IT professionals.

10-154-106 Comp TIA A+ Practical Applications 2 Credits

Students will increase their skills and knowledge in which troubleshooting and tools must be applied to resolve problems. Students will develop a working understanding of hardware, operating systems, networking, and security concepts and apply it to problem-solving situations.

10-154-109 IT Help Desk Fundamentals 1 Credit

This course will explore fundamental IT help desk responsibilities, including project management concepts, software installation, basic networking, performing root cause analysis when troubleshooting and demonstrate effective documentation techniques using ticket management software. Important soft skills, including customer service skills relevant to the help desk professional will also be practiced and assessed. Learners will demonstrate acquired skills by participating in the student-run help desk under the supervision of an IT instructor or other campus supervisor.

Prerequisites:

IT Concepts (10-107-191) AND

CompTIA A+ Essentials (10-154-101) OR

CompTIA A+ Practical Applications (10-154-106)

10-154-110 Hardware/Software Fundamentals 3 Credits

Students will learn all aspects of computer hardware and software commonly used in a business workplace. Students will develop their troubleshooting skills and use tools to resolve technology-related issues. Students will install, configure, troubleshoot, repair, and maintain computer hardware and operating systems. Network technologies, security concepts, and common standard operating procedures for IT departments will be covered. Students will demonstrate good communication skills and professionalism required of all entry-level IT professionals.

10-182-103 Purchasing 3 Credits

Learners will examine the role of purchasing within an organization and explore basic purchasing activities. Learners will develop an evaluation for the purchasing function to include analyzing ordering quantities, selecting and evaluating suppliers, and monitoring cost. Students will be introduced to negotiating skills, strategies, tools, and techniques, and will develop their own negotiating skills as they explore topics in communication, strategy, perception, bias, leverage, ethics, global negotiations, and managing difficult negotiations.

10-182-104 Inventory Management 3 Credits

Learners will develop an effective plan to minimize the cost of inventory while still meeting customer demand. Learners will create a foundation for managing materials and labor in an organization to include creating bills of materials and routings and understanding inventory records and transactions. Learners will examine the benefits and challenges of forecasting and its use in accurate scheduling of customer demand. Learners will develop an effective plan to manage the flow of materials and labor through the production process.

10-182-107 Logistics 3 Credits

Learners will develop an understanding of logistics within a supply chain. Learners will examine the methods and requirements of transporting materials in a supply chain, and determine how to properly apply warehousing to a supply chain to reduce cost and improve efficiency.

10-182-108 Global Supply Chain Management 3 Credits

Learners will explore strategies and gain insight into developing an international supply chain. Learners will examine the process of identifying, qualifying, and negotiating the purchase of goods from global sources, and consider factors that affect global transportation of both imports and exports.

10-182-109 Service Operations Management 3 Credits

Learners will examine the unique requirements of providing an intangible product and formulate strategies to cultivate customer satisfaction. Learners will design delivery systems that meet the needs of service based customers and provide the required level of customer service.

10-182-110 Supply Chain Management Internship 2 Credits

Students will obtain practical, hands-on experience while applying skills developed in the Supply Chain Management program at an approved site with employer and instructor supervision. Professional behavior, good communication, and positive interpersonal skills will also be demonstrated. Students must have approval from the instructor to enroll in this course.

10-182-117 Standard Work and Mistake Proofing 1 Credit

Learners will examine the lean tools used to standardize a process. Learners will develop standard work practices that reduce errors and increase efficiency.

10-182-132 Lean Six Sigma(2): Measure/Analyze 1 Credit

Learners will collect and analyze data to address a defined problem.

Prerequisite:

Lean Six Sigma(1): Select/Define a Project (10-182-131)
Introductory Statistics (10-804-189)

10-182-133 Lean Six Sigma(3): Improve/Control 1 Credit

Learners will implement a solution to a defined problem and create a control system to monitor and maintain the improvement.

Prerequisite:

Lean Six Sigma(1):Select/Define a Project (10-182-131)
Lean Six Sigma(1):Measure/Analyze (10-182-132)
Introductory Statistics (10-804-189)

10-182-134 The Role of Logistics 1 Credit

Learners will develop an understanding of logistics within a supply chain.

10-182-137 Technology in the Supply Chain 3 Credits

Learners will investigate technology advances that have improved the efficiency of supply chain management and review the processes that make up a business enterprise and examine the advantages and disadvantages of implementing Enterprise Resource Planning (ERP) software. Learners will develop process modeling strategies to improve existing supply chains.

10-182-138 Supply Chain Capstone 2 Credits

Students will obtain practical, hands-on experience while applying skills developed in the Supply Chain Management program at an approved site with employer and instructor supervision. Professional behavior, good communication, and positive interpersonal skills will also be demonstrated. Students will also demonstrated knowledge of the program TSA's (Technical Skill Attainment).

Co-requisites:

Inventory Management (10-182-104)
Purchasing (10-182-103)
Logistics (10-182-107).

10-196-119 Managerial Budgeting and Finance 3 Credits

The learner applies the skills and tools necessary to make sound financial decisions and recommendations. Each learner will demonstrate the application of financial planning, budgeting, cost measures, activity-based costing, and control measures.

10-196-208 Personal Leadership 3 Credits

Students will learn about time management and personal planning, emotional intelligence, effective communication, assertiveness and stress management related to the challenges of a supervisor.

10-196-209 Team Building and Problem Solving 3 Credits

Students will learn the benefits and challenges of group work, necessary roles in a team, stages of team development, meeting facilitation, different approaches to problem solving, consensus, data acquisition, analysis, developing alternative solutions, implementation and evaluation.

10-196-210 Legal Issues for Supervisors 3 Credits

Students will learn legal practices of recruiting, interviewing, hiring, selection, evaluation/promotion, employee discipline, firing, EEOC and nondiscrimination, employee privacy, workplace harassment, FMLA, ADA and unions.

10-196-211 Workplace Innovations 3 Credits

Student will implement the use of inventive thinking techniques and innovative methods to improve work processes in multiple workplace environments; research and analyze the use of technology in businesses to promote innovation in the workplace; develop an innovative, entrepreneurial, and entrepreneurial mindset.

10-196-212 Training and Talent Development 3 Credits

Students will become acquainted with the principles and methods for training employees on the job. Experience practical training exercises that include the development of learning objectives and receipt of feedback through a training evaluation. Spend time organizing the training function within an organization and career planning for individual employees.

10-196-213 Workplace Safety 3 Credits

Students will learn safety awareness, federal/state/local compliance, inspections, risk analysis, workplace violence, substance abuse, health hazards, first aid, CPR, fire and electrical safety, and emergency preparedness.

10-196-214 Leading Strategically 3 Credits

Students will explore the organizational interrelationships that exist between strategy, structure, and the behavior of various size companies.

10-196-215 Project Management Fundamentals 3 Credits

Students will become familiar with the role of project management, developing a project proposal, demonstration of relevant software, working with project teams, sequencing tasks, charting progress, dealing with variations, budgets and resources, implementation, and assessment.

10-196-216 Leading Change 3 Credits

Students will learn to resolve challenges and handle the personnel dynamics in facilitating change within an organization.

10-196-217 Leadership Development Career Experience 2 Credits

Students will obtain practical, hands on experience while applying skills developed in the Leadership Development program with instruction supervision. Professional behavior, good communication, and positive interpersonal skills will also be demonstrated. Students will also demonstrate knowledge of program TSA's (Technical Skills Attainment).

Pre-requisite: 10-196-214 Leading Strategically

10-196-300 Foundations and Non-profits **3 Credits**
Students will gain an introduction into concepts of nonprofit organizations as well as foundation types and their purposes and operations. Students will explore the differences between nonprofits and for-profit organizations as well as the general purpose and principles of foundations.

10-196-301 Current Trends in Non-profits **3 Credits**
An introductory course aimed at providing an overview of the essential functions of a nonprofit organization. In this course students are introduced to the fundamentals of effective mission and vision statements, strategic planning, operations management, Board development, and budgeting.

10-196-302 Non-profit Strategic Planning **3 Credits**
Analyze current business and development strategies, recognize trends, develop vision and mission statements, identify funding benchmarks, measure business and development efforts against benchmarks, recommend future directions and strategies and stakeholders (with input from program, donors, potential donors). By the end of this course, students will have an opportunity to develop a mock strategic plan for a nonprofit organization.

10-196-303 Non-profit Leadership **3 Credits**
Students will learn about strategies that leaders use specifically to lead those who work in nonprofit organizations. This will include leading volunteers and effectively leading organizations where the mission is not to increase stakeholder wealth or to create a profit, but rather the strategy and mission is to provide a community service or to be socially responsible.

10-196-304 Board Relations and Volunteer Management **3 Credits**
A dynamic course that focuses on developing and engaging a cohesive and strategic board of directors. Topics include defining the role of the board, strengthening the working relationship between staff members and board members, and organizing and facilitating effective meetings, publishing meeting minutes, and agreeing on tasks/next steps.

10-196-305 Meeting and Event Planning **3 Credits**
Students will explore different aspects of planning professional meetings and events, including scheduling, budgeting, marketing, venues, agendas, meeting and event invitations and RSVPs, speakers and presenters, facilitating the meeting, etc. Students will use scheduling software such as Microsoft Outlook and other software programs to assist with planning meetings and events. By the end of this course, students will have an opportunity to develop draft meeting agendas and a mock event plan.

10-196-306 Nonprofit Branding and Marketing **3 Credits**
Students will explore: What is nonprofit marketing, inbound marketing for nonprofits, creating a nonprofit marketing plan on a limited budget, and marketing strategies for nonprofit organizations as well as budget considerations for marketing proposals. Students will also explore guerilla marketing techniques, e.g. press releases, blog posts, social media, through the creation of a marketing plan. By the end of this course, students will have an opportunity to develop a mock marketing plan for a nonprofit organization.

10-196-307 Nonprofit Revenue Generation 1 **3 Credits**
In this dynamic class you will learn how to: apply fundamental fundraising principles and ethics to your organization strategy, develop a gift agreement(s) for scholarship, designated, field of interest funds, and analyze the planning and execution of a capital campaign to improve your campaigns, and plan and prepare key sections of a grant application.

10-196-308 Community & Social Service in Nonprofits **3 Credits**
Students will gain knowledge of direct service work, including engaging with a client population on an interpersonal level. Students will learn the operational needs of serving at-risk clients, oversee daily activities on-site, and effectively act as advocates to clients to receive necessary care and services.

10-196-309 Nonprofit Revenue Generation 2 **3 Credits**
Build revenue streams for your nonprofit organization. They are essential to accomplish the organization mission and provide consistent operations' support. Discover how to increase revenue from your current activities. Develop strategies for building new ones. Know how to effectively set prices or fees. Understand the 20% that generates 80% of your revenue--the necessity to identify and secure lead gifts as a foundation for any campaign. These are basic concepts that will yield greater results.

10-196-310 NonProfit Leadership Career Experience **3 Credits**
Students can select any hands on experience related to Internship or Field Research relating to the Nonprofit Leadership Development program with instruction supervision. Students will develop skills in the foundations of leadership, with Professional behavior, good communication, and positive interpersonal skills will also demonstrated. Students will also demonstrate knowledge of program TSA's (Technical Skills Attainment).

Pre-requisite:
NonProfit Leadership 10-196-303

10-196-311 Nonprofit Financial Tools for Decisions **3 Credits**
The learner will explore relevant reporting tools that lead to enhanced decision-making and precise results. Students will utilize budgeting and financial reports for planning and identification of key performance indicators.

10-201-101 Design Fundamentals **3 Credits**
Students apply the elements of art (line, texture, color, shape, and value). Students will investigate how these elements can be manipulated using various principles of design to achieve different effects. Basic color theory will be covered.

10-201-110 Pre-Press Management **3 Credits**
Students develop skills and techniques that are necessary to perform before a project is printed to ensure the project's highest quality. Students will learn proofreading skills and techniques and how to apply color management. Students will learn and use Adobe Acrobat 9.0 to perform pre-press operations.

Prerequisites:
Illustrator (10-201-134) AND
InDesign (10-201-135)

10-201-124 Portfolio Introduction **1 Credit**
Students plan individual professional portfolios. They will write goal statements and understand the value of career goal setting. Students will identify work samples that should be included in a professional portfolio and begin resume design. Portfolios will be finalized in the final semester of the program.

10-201-128 Internship/Field Study **3 Credits**
Students obtain on-the-job experience in a web and/or graphic design department. Students work in an area focusing on web and/or graphic design. Internships comprise realistic work situations required by an entry-level web/graphic designer.

Prerequisites:
HTML & CSS (10-152-116)
Illustrator (10-201-134)
InDesign (10-201-135)
Typography (10-201-138)

Co-requisite:
Web Page Design 2 (10-201-140)

10-201-129 Graphic and Web Design Projects 3 Credits
This is a project-based course where students will apply marketing concepts to brand a product or service across various mediums. Students will develop a consistent brand for a product or service that is carried through on various design projects: logo, business card, product guide, packaging, and mobile app. The students will participate in a final presentation where they pitch their ideas and prototypes to a fictitious development team.

Prerequisites:
Design Fundamentals (10-201-101)
Illustrator (10-201-134)
InDesign (10-201-135)

Co-requisite:
Web Page Design 2 (10-201-140)

10-201-133 Photoshop 3 Credits
This course introduces the learner to photo manipulation and enhancement using the industry leading Adobe Photoshop software. Course will also cover composition images, illustration, color correction, file formats, scanning, 3D objects, image quality and preparing images for print and web mediums. A working knowledge of computers is required for this course, including the ability to save and organize files. This course uses Macintosh computers; previous Macintosh experience is helpful but not necessary.

10-201-134 Illustrator 3 Credits
This course prepares the student to use Adobe's standard vector graphics software to create digital illustrations. The course will cover the basics of illustration as it relates to the digital environment. Students will turn out professional-looking graphics for web or print with Adobe Illustrator software. Through practical exercises, students become fluent in the premier program for line art, logos, vector graphics and quick page layout. A working knowledge of computers is required for this course, including the ability to save and organize files. This course uses Macintosh computers; previous Macintosh experience is helpful but not necessary.

10-201-135 InDesign 3 Credits
This course prepares the student to use Adobe's standard page layout software. Using Adobe InDesign, students will turn out professional-looking layouts for both print and web. Through practical exercises, students become fluent in constructing multi-page documents, master pages and digital publishing as well as tricks and time efficient techniques to keep work clean and professional.

Prerequisites:
Design Fundamentals (10-201-101)
Photoshop (10-201-133)

10-201-136 Multimedia Concepts 3 Credits
This course teaches students how to create various multimedia elements including video, audio, and basic animation. Students will learn how to incorporate these elements into various forms of digital mediums.

10-201-137 Color Theory 3 Credits
Students will explore the fundamental components of color. Lectures and exercises introduce color theory, psychology, perception, value, harmonies and trends. Students will use a wide range of tools, techniques and media on a variety of assignments to learn how one can communicate with color.

10-201-138 Typography 3 Credits
This course prepares the learner to learn the basics of identifying, choosing, and using typefaces. Students will classify type by families, interpret choices for legibility and readability and compare best practices for using type. This course will prepare students to design type and develop creative documents using type. This is a living plan. Topics may change as the tenor of this class commands.

10-201-139 Web Page Design 1 3 Credits
Students develop skills that lay the foundation for producing web-ready communications: graphic design principles, storyboards, web development, shared project management skills such as interviewing and project scheduling, peer review, and redesign. Project activities focus on developing effective communications that can be deployed on the web. Students develop a variety of graphical images, an electronic portfolio, and a client website. Projects are accomplished using Dreamweaver and other Adobe Software.

Prerequisites:
Photoshop (10-201-133) AND
HTML & CSS (10-152-116)

10-201-140 Web Page Design 2 3 Credits
This course will focus on more advanced website design and development skills. Students will learn the importance of responsive design and gain hands-on experience in producing responsive websites for computer, tablet and mobile devices. Students will use advanced features in Dreamweaver and are exposed to content management systems like Word Press.

Prerequisites:
Web Page Design 1 (10-201-139)
HTML & CSS (10-152-116)

10-201-141 Professional Portfolio Assessment 2 Credits
Students will complete professional portfolios containing examples of their work that demonstrate competency as a graphic/web designer. Resumes will be completed and students will practice job search and interview skills. Students will role-play in a mock interview utilizing their portfolios and demonstrating competence of what was learned.

Prerequisite:
Illustrator (10-201-134)
InDesign (10-201-135)
Corequisite:
Web Page Design 2 (10-201-140)

10-201-142 Digital Marketing for Graphic Designers 3 Credits
This course focuses on how graphic designers can achieve marketing objectives using digital technologies and media. Students will gain an appreciation for current mobile marketing strategies and the importance of being adaptable with communication techniques. Students will learn how to develop relevant, appropriate content based on different media outlets. A focus on marketing analytics is included in this course.

10-201-143 Beginning WordPress 2 Credits
WordPress is one of the most popular and fastest growing open source content management systems available today. This course provides an introduction to WordPress for building and managing websites. Students will learn the differences between WordPress.com and WordPress.org. In addition, students will learn how to install WordPress, use a theme and plugins, and how to add and manage content.

Prerequisite:
HTML & CSS (10-152-116)

10-201-144 Freelancing for Creatives 1 Credit
Nearly every type of design service needed by most businesses could be provided by a freelancer, including marketing, publicity, advertising, web programming, and other creative works performed by a graphic designer. In this course students will learn what it takes to be a freelancer: finding work, setting budgets, creating contracts, and other money-related issues.

10-203-131 Introduction to Digital Photography 3 Credits
Students will explore the operations of a digital camera and explore photography as an artform. Students will develop habits for professional work, and create a wide range of images for portfolio-quality production. Students will develop knowledge and understanding of the digital camera, the fundamentals to stronger photographs, and basic photo editing. This is a living plan. Topics may change as the tenor of this class commands.

10-307-108 ECE: Early Language & Literacy 3 Credits
This course explores strategies to encourage the development of early language and literacy knowledge and skill building in children birth to 8 years of age. Learners will investigate the components of literacy including; literacy and a source of enjoyment, vocabulary and oral language, phonological awareness, knowledge of print, letters and words, comprehensions and an understanding of books and other texts. Theories and philosophies regarding children's language and literacy development will be addressed. Dual language learning will be examined within the context of developmentally appropriate practices. Assessment tools for early language and literacy acquisition will be reviewed.

10-307-110 ECE: Soc S, Art, & Music 3 Credits
This course will focus on beginning level curriculum development in the specific integrated content areas of social studies, art, music and movement (SSAMM).

10-307-112 ECE: STEM 3 Credits
This course will focus on beginning level curriculum development in the specific integrated content areas of science, technology, engineering, and mathematics.

10-307-148 ECE: Foundations of ECE 3 Credits
Students are introduced to the early childhood profession. Students integrate strategies that support diversity and anti-bias perspectives; investigate the history of early childhood education; summarize types of early childhood education settings; identify the components of a quality early childhood education program; summarize responsibilities of early childhood education professionals; explore early childhood curriculum models.

10-307-151 ECE: Infant & Toddler Dev 3 Credits
Students study infant and toddler development as it applies to an early childhood education setting. Students integrate strategies that support diversity and anti-bias perspectives; analyze development of infants and toddlers (conception to three years); correlate prenatal conditions with development; summarize child development theories; analyze the role of heredity and the environment; examine research-based models; examine culturally and developmentally appropriate environments for infants and toddlers.

10-307-160 ECE: Field Experience 1 3 Credits
This 3-credit introductory field experience course, introduces the foundations of early childhood education under guided supervision of a mentor teacher in an early childhood setting, working with children birth through age 8. This course meets the requirements for the Wisconsin Model Early Learning Standards 18-hour training.

10-307-167 ECE: Hlth Safety & Nutrition 3 Credits
Students examine the topics of health, safety, and nutrition within the context of the early childhood educational setting. Students integrate strategies that support diversity and anti-bias perspectives; follow governmental regulations and professional standards as they apply to health, safety, and nutrition; provide a safe early childhood program; provide a healthy early childhood program; provide a nutritionally sound early childhood program; adhere to child abuse and neglect mandates; apply Sudden Infant Death Syndrome (SIDS) risk reduction strategies; incorporate health, safety, and nutrition concepts into the children's curriculum.

10-307-170 ECE: Field Experience 2 3 Credits
This 3-credit intermediate field experience course includes assisting the mentor teacher in carrying out classroom routines and implementing developmentally appropriate learning experiences that promote child development and learning through play for children birth to age 8.

10-307-179 ECE: Child Development 3 Credits
Students examine child development within the context of the early childhood education setting. Students analyze social, cultural, and economic influences on child development; summarize child development theories; analyze development of children age three through age eight; summarize the methods and designs of child development research; analyze the role of heredity and the environment.

10-307-187 ECE: Children w Diff Abilities 3 Credits
Students focus on the child with differing abilities in an early childhood education setting. Students integrate strategies that support diversity and anti-bias perspectives; provide inclusive programs for young children; apply legal and ethical requirements including, but not limited to, ADA and IDEA; differentiate between typical and exceptional development; analyze the differing abilities of children with physical, cognitive, health/medical, communication, and/or behavioral/emotional disorders; work collaboratively with community and professional resources; utilize an individual educational plan (IEP/IFSP) for children with developmental differences; adapt curriculum to meet the needs of children with developmental differences; cultivate partnerships with families who have children with developmental differences.

10-307-188 ECE: Guiding Child Behavior 3 Credits
Students examine positive strategies to guide children's behavior in the early childhood education setting. Students integrate strategies that support diversity and anti-bias perspectives; summarize early childhood guidance principles; analyze factors that affect the behavior of children; practice positive guidance strategies; develop guidance strategies to meet individual needs; create a guidance philosophy.

10-307-190 ECE: Field Experience 3 3 Credits
This 3-credit advanced field experience course focuses on supporting young children's development birth to age 8 through observation, assessment, and implementation of developmentally appropriate teaching strategies.

10-307-195 ECE: Family & Community Rel 3 Credits
Students examine the role of relationships with family and community in early childhood education. Students implement strategies that support diversity and anti-bias perspectives when working with families and community; analyze contemporary family patterns, trends, and relationships; utilize effective communication strategies; establish ongoing relationships with families; advocate for children and families; work collaboratively with community resources.

10-307-210 ECE: Field Experience 4 3 Credits
This final 3-credit pre-professional field experience course focuses on demonstrating a comprehensive understanding of children birth to age 8, and families. An emphasis is on practicing the lead teacher role to design, implement and evaluate a connected unit of learning experiences.

10-325-101 Golf Course Operations 3 Credits
Students tee time operation, rules of golf, terminology, licenses and certification, strategic and operational planning, golf associations, course/club membership / ownership's, and policies and procedures within a golfing facility.

10-325-102 Career and Leadership Development 2 Credits
Course emphasis is placed on business organizational structures within the golf industry, career planning, goal setting, leadership, and job seeking skills.

10-325-103 Pro Shop Management 3 Credits
Students study policies and procedures for inventory control systems, work schedules, sales and service, product lines, pricing strategies, vendors and suppliers, quality control issues, tournament operations and programs, golf cart operations, teaching programs, and practice range operations.

10-325-104 Club Financial Management 3 Credits
Students study budgeting, banking, cash control procedures, the accounting cycle, financial reports, payroll procedures, labor costs, depreciation expense, and financial controls.

10-325-107 Soils, Conservation, and Fertility 3 Credits
Students study the establishment, modification, and maintenance of northern turf grasses. They learn about irrigation systems, drainage needs, and soil tests. They study weather-related issues, diseases, insects, pesticide application, and appropriate chemicals.

10-325-108 Tournament Promotions 2 Credits
Students work in cooperation with a local golf course to apply promotion, marketing, and business principles to the development of plans and implementation of a group golf tournament program or outing.

10-325-109 Integrated Turf Management 3 Credits
Students study the establishment, modification, and maintenance of northern turf grasses. They learn about irrigation systems, drainage needs, and soil tests. They study weather-related issues, diseases, insects, pesticide application, and appropriate chemicals. Students study integrated pest management strategies (IPM).
Prerequisite:
Turf Grass Horticulture (10-325-127)

10-325-110 Golf Course Design and Renovation 2 Credits
Students learn maintenance procedures for non-turf areas, bunkers, and ornamental plantings. They study the protection of environmentally sensitive areas, the management of water hazards, and the care of trees. Students also learn the safety issues with golf design and appropriate renovation techniques / procedures.

10-325-113 Golf Course Equipment Repair 3 Credits
Students study safe operating procedures, basic repairs, and maintenance practices to develop their understanding of the principles behind the operation of turf management and recreational equipment.

10-325-114 Techniques for Teaching Golf 2 Credits
Students study the principles and techniques involved in teaching people the rules and etiquette of golf as well as the fundamentals and mechanics of the golf swing.

10-325-118 Golf Course Irrigation Systems 3 Credits
Students gain knowledge about irrigation systems for golf courses. Students learn how to effectively manage the irrigation systems. Students also learn about calibration, design, installation, repair, diagnostics, water efficiency, rates and frequency, water quality, disease and pest control, trace elements, water sampling, minerals deposits, effluent wastewater handling, and pump house design and maintenance.

10-325-124 Player Development 1 2 Credits
Students learn skills needed to help them pass the PGA players ability test. The course will concentrate on players putting, chipping and full swing. The use of modern teaching tools and swing analysis equipment will be provided. Students have hands-on lessons with PGA instructors and create their own learning portfolio.

10-325-127 Turf Grass Horticulture 3 Credits
Biological principles of growing horticultural crops with an emphasis toward turfgrass- including anatomy, reproduction, light, temperature, water, nutrition, and growth and development. Laboratory exercises emphasize environmental factors and permit detailed observation of plant growth.

10-325-128 Spring Internship: Clubhouse 1 Credit
Course will focus on tournament and league organization/prep including complete entry forms, rules of competition, checklist, entry fee, prize payouts, and financial breakdowns. Students will learn multi-day tournament set up as well as league play.

10-325-129 Summer Internship: Clubhouse 1 Credit
This class is designed to complement the work experience a student will receive during a summer internship: The student will report on Tournament activities worked. The student will Shadow/Report Food and Beverage Director as well as teaching Professional. The Student will report on staffing levels and show mastery of point of sale equipment.

10-325-130 Fall Internship: Clubhouse 1 Credit
In this course students will recap the summer experience and connect the important relationship between revenue and expense and how the customer service experience plays a vital role in a clubs success.

10-325-131 Spring Internship: Maintenance 1 Credit
This course is designed to help prepare the student for a summer internship by introducing them to an Integrated Pest Management plan, Turf types found on their internship site, and equipment used on the internship site.

10-325-132 Summer Internship: Maintenance 1 Credit
During this course Students will be exposed to the hands on maintenance of an operational golf course. The students will focus on and report back on the following areas of the clubs maintenance operation: staff scheduling, chemical & fertilization programs, equipment needs/repairs/costs, irrigation schedules, and the club's overall integrated pest management program.

10-325-133 Fall Internship: Maintenance 1 Credit
In this course the Student will recap their experience at the golf facility as well as complete the experience with a winterization procedure where necessary. The student will analyze the Chemical and Fertilizer program performance as well as the irrigation schedule. The student will report on rounds played and their relationship to the maintenance practices. The student will analyze equipment needs and repair cost associated with the facility.

10-410-101 Construction Fundamentals 3 Credits
Develop the knowledge skills process and understanding of site plans, footings and foundations, floor plans, elevations, below-grade piping, above-grade piping, isometric piping diagrams, schedules and details, electrical floor plans, lighting, ventilating, and air conditioning. OSHA standards are covered.

10-449-160 Industrial Safety Practices & Career Development 1 Credit
Students will gain an understanding of the OSHA regulations governing safety in the workplace. They will earn an OSHA 10-hour certification card upon successful completion of this course. Students will also be introduced to the ASME safe rigging practices to be applied to rigging applications in the field. Students discover employment strategies designed to assist in securing employment. The course will help develop an awareness of personal and academic skills as they relate to the job seeking process.

10-481-101 Solar Photovoltaic Technology 3 Credits
Examines the scientific principles, engineering design, and economic analysis of solar photovoltaic systems. Complete a site assessment, specify hardware components, and model economic performance for a solar PV system. This course can be applied as an elective for several STEM degree programs at SWTC and four-year universities, particularly those with program emphases in sustainability and renewable energy.

10-481-102 Introduction to Renewable Energy 3 Credits
An overview of various renewable energy technologies and sustainable design practices and their current applications. Emphasis is placed on policies, renewable energy production, green products and jobs.

10-481-103 Intro to Energy Management 3 Credits
Introduces the basic concepts of energy, utility systems and utility rate structures; defines the need for energy management as an integral part of society at all levels. The course will present the various opportunities available to energy management students.

10-481-104 Lighting Fundamentals **3 Credits**
Light sources, luminaries, lighting controls, manufacturer lamp and ballast specifications, lighting power density, lighting-HVAC interactions, retrofit opportunities, cost savings analysis and lighting codes/regulations. Students will critically evaluate lighting systems, luminaries and associated components. Understand and perform various types of lighting calculations.
Prerequisite:
Intro to Energy Management 10-481-103

10-481-105 Energy Control Strategies **3 Credits**
Building system control concepts and devices; including electric and digital controls, emphasis is placed on identifying and understanding control strategies related to energy using systems and methods to estimate energy savings.

10-481-106 Commercial HVACR Analysis **3 Credits**
Identify commercial HVAC system types and the general energy use impact of each type. Calculations of system equipment efficiencies will be used to determine EER, SEER, AFUE, COP, combination and seasonal efficiency in boilers, and balance point partial efficiency.

10-481-107 Energy Accounting **3 Credits**
Review of energy units, data gathering for energy accounting utility rates and schedules, energy data organization, adjusted baselines, cost avoidance, load factor, data analysis, data presentation, use of utility energy accounting software.

10-481-108 Energy Modeling **3 Credits**
This course will teach the student how to use Manual J from ACCA, REScheck, and REMrate. Students will develop the skills to do residential heating and cooling heat loads. Students will calculate heat loss and also losses or gains due to infiltration, sun loads and internal gains. Additionally, the students will begin to investigate energy consumption associated with lighting, appliances and plug loads.

10-481-109 Sustainable Energy Mngt Career Experience **2 Credits**
Students will obtain practical, hands-on experience while applying skills developed in the Sustainable Energy Management program at an approved site with employer and instructor supervision. Professional behavior, good communication, and positive interpersonal skills will also be demonstrated.

10-501-101 Medical Terminology **3 Credits**
This course focuses on the component parts of medical terms: prefixes, suffixes and word roots. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

10-501-107 Digital Literacy for Healthcare **2 Credits**
Provides an introduction to basic computer functions and applications utilized in contemporary healthcare settings. Students are introduced to the hardware and software components of modern computer systems and the application of computers in the workplace. Emphasizes the use of common software packages, operating systems, file management, word processing, spreadsheet, database, Internet, and electronic mail.

10-501-153 Body Structure and Function **3 Credits**
The learner will become familiarized with the body structures, the functions, and examine the interrelationship between structure and function.

10-503-100 Firefighting Principles **4 Credits**
This course will provide the student an understanding of the principles of firefighting and fire department operations. It includes fire behavior, use of personal protective equipment, fire attack, and extinguishing methods.

10-503-101 Hazmat Awareness & Ops **2 Credits**
This course will provide the student with the necessary training to operate at awareness and operational level for hazardous materials response in emergency situations.

10-504-101 Introduction to Criminal Justice Studies **3 Credits**
Learners will distinguish between the roles and functions of courts with jurisdiction in Wisconsin, differentiate between the roles and functions of federal, state, and local law enforcement agencies; apply professional principles as a law enforcement officer; determine modern police functions and policies from an historical perspective; identify the role of law enforcement officers in American society; identify the law enforcement policies required by Wisconsin statutes; defend the importance of written agency policies; distinguish between ministerial and discretionary duties; utilize a decision-making model; identify the characteristics of a good decision maker; describe how professionalism, ethics, and moral standards relate to a law enforcement career; practice a code of behavior that embodies the principles and obligations of the law enforcement code of ethics; incorporate ethical decision making strategies; describe how decisions are made; enhance an officer's critical thinking and police problem solving skills; and apply principles of critical thinking, decision-making, and problem solving.

10-504-102 Constitutional Law Application **3 Credits**
Learners will diagram the structure of the criminal justice system, identify situations where constitutional rules are applicable; identify situations where an officer may use reasonable suspicion to contact a subject; identify the elements of a lawful arrest; identify search-related activities where the 4th amendment is not applicable; identify the requirements that pertain to search warrants; analyze situations where an officer may conduct a search without a warrant; compare the requirements for conducting routine searches with those for searching disabled persons and strip searches, identify the requirements of the laws governing confessions and statements; and analyze the various requirements that evidence must meet before it can be admitted in court.

10-504-103 Criminal Law Studies **3 Credits**
Learners will identify basic concepts of criminal law; analyze facts, circumstances, and situations and determine which, if any, crimes against persons have been committed; analyze facts, circumstances, and situations and determine which, if any, crimes against property have been committed; and analyze facts, circumstances, and situations and determine which, if any, crimes involving drugs, alcohol or other criminal activity have been committed.

10-504-107 Criminal Investigation Application **3 Credits**
The learner will describe the role evidence plays in criminal investigations and prosecutions; apply the steps for processing crime scenes; apply appropriate strategies to locate, handle, and package evidentiary items; document the crime scene; recognize the unique investigative issues for crimes against life; apply appropriate strategies to secure the scene, collect and preserve evidence, and investigate a death; recognize the dynamics of victimization; apply knowledge of the definitions and responsibilities for law enforcement; analyze the role of law enforcement in responding to domestic abuse; intervene and apply appropriate investigative strategies; respond to an officer-involved domestic violence incident; analyze the role of law enforcement in responding to sexual abuse; demonstrate investigative techniques in a simulated sexual assault case; and identify other resources that can assist in sexual assault cases.

10-504-119 Introduction to Corrections **3 Credits**
The theories, philosophies, and practices of corrections will be examined. The history and current trends will be used to analyze the differences between correctional options.

10-504-120 Homeland Security/Terrorism 3 Credits
Students discuss the United States Department of Homeland Security and its mission will be investigated. Students analyze the use of chemical, biological, radiological, nuclear and explosive devices, and the use of these weapons of mass destruction. Discussion on the importance and basic elements of a planned response, methods used to prevent the importation of weapons of mass destruction into the U.S., and learn what is being done and what can be done to prevent another large-scale terrorist incident in the U.S. Learn the Incident Command System required by National Incident Management System as well as the National Emergency Response System. Analysis will be made of areas of threat identification, natural and man-made emergency operation planning and counterterrorism response.

10-504-126 Communication Principles for Emergency Services 3 Credits
Students will learn how to write a wide variety of law enforcement reports to accurately and fairly convey necessary information for use by investigators, prosecutors, and the public. Students will discuss the role of communication and how to apply specific communication skills and the strategies in a variety of simulated situations. Principles, guidelines, and techniques for law enforcement response to persons with possible mental disorders, alcohol or drug problems, dementia disorders, and/or developmental disabilities will be investigated. Students will practice the basics of presenting effective court testimony and will have the opportunity to practice giving testimony based on a report they have previously written. Students will learn techniques and procedures necessary to interview or interrogate a variety of individuals, including adult and juvenile witnesses, suspects, and victims.

10-504-127 Emergency Response and Intervention 3 Credits
Students will explore various unique challenges facing law enforcement officers operating in the criminal justice system. Specifically, students will examine contemporary issues surrounding tactical response options, active shooter response, hostage situations, mass panic and civil disorders, public health and pandemic response, natural disaster, and hazardous materials response. Students will examine the role of law enforcement professionals within the greater emergency management spectrum as it relates to the incident command structure.

10-504-128 Criminal Justice Internship 3 Credits
Students will participate in activities that will directly prepare them for the law enforcement academy. This course is designed for students that are actively seeking enrollment in a law enforcement academy and includes extensive fitness training as well as skills necessary to be an officer in Wisconsin.

10-504-129 Criminal Evidence 2 Credits
Students recognize and appreciate the legal process and procedures involved in developing a case. They explore the history and necessity for having legal guidelines. Students practice collecting a variety of evidence including: trace, biological, fingerprint, and impression, and prepare a case for court.

10-504-134 Emergency Telecommunicator 2 Credits
Based on standards, guidelines, and best practices, we will discuss issues relevant to one and two person communication centers and provide tips and recommendations on how to be a better call taker and dispatcher. Topics covered will be

- Telecommunication Essentials/Roles and Responsibilities
- Call Management
- Proper Call Classification/Coding
- Legal Considerations
- Dispatch Stress

This is a National Certification.

10-504-135 Law Enforcement Academy Prep 3 Credits
Students will participate in activities that will directly prepare them for the law enforcement academy. This course is designed for students that are actively seeking enrollment in a law enforcement academy and includes extensive fitness training as well as skills necessary to prepare for future law enforcement training. Students will also engage in instructor guided experiential learning related to course content.

10-504-154 Community Policing in a Diversity Society 3 Credits
Students will explore key insights and information relevant to criminal justice professionals engaged in law enforcement contacts with a variety of cultures, physical or mental conditions, and environmental challenges. Students identify principles, techniques and behaviors that promote community service and effective interaction in a diverse society. Students will learn to recognize and respond to people with mental illness by utilizing knowledge and community resources. They identify the differences in policing techniques given a variety of environments, and the importance of being able to recognize and adapt quickly in order to solve, rather than create or add to, a problem situation. They apply principles and techniques of good communication, decision-making, and problem solving-oriented policing. They implement principles and techniques of crime prevention and gaining community support for police efforts. Students will also engage in instructor guided experiential learning related to course content.

10-504-156 Community Service Field Experience 3 Credits
In this course, the student learner will develop and complete a meaningful community service project. During this project, the student will create community partnerships that foster a sense of social responsibility, and will potentially expose the student to diversity and multiculturalism. At the same time the student will develop life-long skills, community and professional partnerships while gaining real world communication and employment skills.

10-504-160 Basic Introduction to Policing 2 Credits
This is a basic overview of basic criminal justice systems. This course includes the Phase I material of Academy Orientation, Fundamentals of Criminal Justice, Ethics, Cultural Competency, Agency Policy, and Professional Communication. Pre-requisite: Acceptance into the 720 Law Enforcement Academy

10-504-161 Basic Police Response 2 Credits
This is a basic overview of patrol responses in law enforcement. It includes the Phase I courses of Critical Thinking and Decision Making, Basic Response, Radio Procedures, Traffic Law Enforcement, First Aid/CPR/AED, and Integration Exercises.

Pre-requisite:
Acceptance into the 720 Law Enforcement Academy

10-504-162 Basic Police Tactics 2 Credits
This is a basic overview of police tactics. It includes the Phase I courses of Fundamentals of Firearms, Vehicle Contacts I, Officer Wellness, DAAT, 4 hours of Integration Exercises, 4 hours of Written Exams, and Physical Readiness.

Pre-requisite:
Acceptance into the 720 Law Enforcement Academy

10-504-163 Basic Police Investigations 2 Credits
This is a basic overview of police investigations. It includes the Phase I courses of Constitutional Law I, Crimes I, Interviews, and Report Writing. Pre-requisite:
Acceptance into the 720 Law Enforcement Academy

10-504-164 Intermediate Police Tactics 3 Credits

This course builds on the basic overview of tactics and to an advanced level. It includes the Phase II courses of DAAT, Firearms II, and TECCLEO part I.

Pre-requisite:
Successful completion of Phase I of the Law Enforcement Academy

10-504-165 Intermediate Police Traffic Response 3 Credits

This course is a covers the complexity of law enforcement driving and vehicle stops. It includes the Phase II courses of EVOC, Community Service Lab, Vehicle Contacts II, 4 hours of Written Exams, and Integration Exercises.

Pre-requisite:
Successful completion of Phase I of the Law Enforcement Academy

10-504-166 Intermediate Police Investigations 4 Credits

This course is a covers the complexity of law enforcement driving and vehicle stops. It includes the Phase II courses of PCS, Tactical Response, Constitutional Law II, Physical Evidence Collection, TECCLEO part 2, Crisis Management, and Physical Readiness.

Pre-requisite:
Successful completion of Phase I of the Law Enforcement Academy

10-504-167 Advanced Police Traffic Response 4 Credits

This course is a covers the complexity of law enforcement traffic and emergency encounters. It includes the Phase III courses of Traffic Law-Radar, Traffic Crash, OWI/SFST, HAZMAT, ICS, Cultural Competence II, Ethics II part 1, Officer Wellness, 4 hours of Written Exam, and Integration Exercises.

Pre-requisite:
Successful completion of Phase II of the Law Enforcement Academy.

10-504-168 Advanced Police Investigations 3 Credits

This course is a covers the complexity of law enforcement investigations. It includes the Phase III courses Ethics II part 2, Interrogations, Testifying in Court, Crimes II, Evidence, Domestic Violence, Juvenile Law, Victims, Sexual Assault, Child Maltreatment, Physical Readiness, and Report Writing.

Pre-requisite:
Successful completion of Phase II of the Law Enforcement Academy

10-504-169 Academy Scenario Assessment 2 Credits

Students participate in prescribed complex scenarios to assess their ability to perform as a law enforcement officer in Wisconsin. Students will complete the Fitness Assessment and additional material.

Pre-requisite:
Successful completion of Phase III of the Law Enforcement Academy.

10-508-101 Dental Health Safety 1 Credit

Prepares dental auxiliary students to respond proactively to dental emergencies, control infection, prevent disease, adhere to OSHA standards, and safely manage hazardous materials. Students also take patient vital signs and collect patient medical/dental histories. CPR certification is required prior to completion of the course.

10-508-103 Dental Radiography 2 Credits

Prepares dental auxiliary students to operate x-ray units and expose bite-wing, periodical, extra oral, and occlusal radiographs. Emphasis is placed on protection against x-ray hazards. Students also process, mount, and evaluate radiographs for diagnostic value. In this course students demonstrate competency on a manikin. In addition, students expose bitewing radiographs on a peer, role-play patient.

10-508-113 Dental Materials 2 Credits

Prepares dental auxiliary students to handle and prepare dental materials such as liners, bases, cements, amalgam, resin restorative materials, gypsum products, and impression materials. They also learn to take alginate impressions on manikins and clean removable appliances.

10-510-114 IV Therapy 1 Credit

Students develop knowledge and skills in the basic concepts of IV therapy, guidelines, regulatory issues and management of I.V. related complications. Students gain proficiency with such skills as venipuncture, blood administration, medication administration, and insertion of venous access devices. Prerequisite: LPN, first year nursing program completion, EMT, or other persons as designated by job role.

10-510-140 Nutrition 3 Credits

Learners examine and use basic nutrition principles in planning and evaluating preconception, pregnancy, lactation, and infant nutrition. They practice conducting routine nutrition screening, evaluate the impact of food safety, and promote healthy diets. Learners adhere to the MANA core competencies for basic midwifery practices as it relates to basic nutrition practices

10-510-146 Well Woman Gynecology 3 Credits

The learner will meet competencies set forth in the care of the well woman from childbearing through menopause; to include history and physical exams, methods of contraception, infertility, unplanned/unwanted pregnancy, human sexuality, and STDs.

Prerequisite:
Antepartum Theory (10-510-160) AND
Antepartum Lab (10-510-161)

10-510-148 Midwife Clinic Lab I 1 Credit

The learner will review and discuss their clinical experience and provide a formal case study presentation with analysis and critical thinking for positive client outcome.

Prerequisites:
Antepartum Theory (10-510-160) AND
Antepartum Lab (10-510-161)

10-510-149 Professional Issues in Midwifery 2 Credits

The learner will prepare for a professional career. Legal and ethical aspects of the profession, opportunities and trends, and professional issues will be covered.

10-510-150 OB/Medication Management 1 Credit

The learner will define the relationship of the midwife and healthcare partners, conditions which require referral and transfer to physician care, and the midwife's role and responsibility to client.

Co-requisites:
Intrapartum (10-510-164)
Postpartum (10-510-165)
Neonate (10-510-166)

10-510-152 Midwife Clinic Lab II 2 Credits

The learner will use critical thinking and problem solving skills utilizing case presentation and analysis using the learner's clinical experiences. The learner will provide input into discussion on ethics, professional considerations, and current practice standards as relates to midwife practice.

Prerequisite:
Midwife Clinic Lab I (10-510-148)
Midwife Clinic 5 (10-510-168)

10-510-153 Applied Pharmacology 2 Credits

The learner will classify medications into correct drug categories and apply basic pharmacology principles. The learner will apply basic pharmacodynamics to identify common medications, medication preparation, and administration of medications used by the major body systems.

10-510-154 Midwife Research 1 Credit

The learner will gain an introductory understanding to midwifery and medical research by becoming research aware, and gaining a basic ability to read, evaluate, and interpret papers from various evidence sources including both research paradigms and the many approaches incorporated within them.

10-510-155 Introduction to Midwifery Practice 2 Credits

The learner will become familiar with the history and development of the CPM, basic principles of midwifery practice with an emphasis on basic healthcare and counseling skills using the Midwifery Model of Care, childbirth education for the consumer, diversity issues, basic terminology, and professional communication skills.

10-510-156 Midwife Science Lab 1 Credit

The learner will become familiar with basic theory and performance of beginning essential health care skills necessary to care for the woman during the childbearing year.

10-510-157 Physical Exam for the Midwife 2 Credits

The learner will become familiar with the needed theory and skills to perform a complete physical exam using an in-depth system approach.

10-510-158 Introduction to Midwife Clinic 1 Credit

The learner will prepare to observe, interact, and analyze maternity services in a variety of clinical settings within classroom and community interaction. The learner will participate in attendance of various childbirth education classes, breastfeeding support meetings, and exploration of public health services.

10-510-159 Midwife Clinic 1 1 Credit

Lecture Hours: 0 / Occupational Hours: 72

The learner will observe and interact within in a clinical setting with a focus on introduction to Midwifery practice and basic general skills. The learner will progress from observation to beginning performance in the clinical application of general basic skills.

Credit for Prior Learning Option:
Credential Notes: Current Certified Professional Midwife (CPM) certification

Prerequisites:
Introduction to Midwife Clinic (10-510-158)
Midwife Science Lab (10-510-156)
Physical Exam for the Midwife (10-510-157)

10-510-160 Antepartum Theory 4 Credits

Antepartum provides an in-depth study of client care through the antepartum including nutrition, establishing pregnancy, the management and support of both psychological and physiological changes in pregnancy. The course includes issues of complications during pregnancy, genetics, embryology, fetology, lab and diagnostic tests.

Prerequisites:
Introduction to Midwifery Practice (10-510-155)
Midwife Science Lab (10-510-156)
Physical Exam for the Midwife (10-510-157)
Introduction to Midwife Clinic (10-510-158)

10-510-161 Antepartum Lab 1 Credit

The learner will become familiar with the theory and performance of essential health care skills necessary during the Antepartum period of pregnancy.

Co-requisite:
Antepartum Theory (10-510-160)

10-510-162 Midwife Clinic 2 2 Credits

Lecture Hours: 0 / Occupational Hours: 144
Births: 7 / Prenatal Exams: 10 Initial Prenatal Exams: 2 / Newborn Exams: 7
Postpartum Visits: 3 / All as Assistant under Supervision

The learner will develop beginning critical thinking skills for the antepartum client with a focus on counseling and education. The learner will perform in the clinical application of skills and theory for the client during the antepartum, intrapartum and postpartum periods of pregnancy using the Midwives Model of Care.

Credit for Prior Learning Option:
Credential Notes: Current Certified Professional Midwife (CPM) certification. Visit the SWTC eCampus Bookstore for book costs and ISBNs.

Prerequisite:
Midwife Clinic 1 (10-510-159)

10-510-163 Midwife Clinic 3 1 Credit

Lecture Hours: 0 / Occupational Hours: 72
Births: 3 / Prenatals: 5 / Initial Prenatals: 1 / Newborn Exams: 3
Postpartum Visits: 2 / All as Assistant under Supervision

The learner will have the opportunity to further develop critical thinking skills using the Midwives Model of care in making clinical decision with an emphasis on antenatal care. The learner will focus on performance of initial history and physical examination including collection of appropriate specimens.

Credit for Prior Learning Option: Credential Notes: Current Certified Professional Midwife (CPM) certification Visit the SWTC eCampus Bookstore for book costs and ISBNs.

Prerequisite:
Midwife Clinic 2 (10-510-162)

10-510-164 Intrapartum 3 Credits

Intrapartum focuses on normal labor and birth. The learner will be able to determine the steps of the normal labor process including mechanisms of labor and birth, how to assess the mother and neonate's well-being, and screening for complications in each stage of labor.

Prerequisites:
Antepartum Theory (10-510-160)
Antepartum Lab (10-510-161)

10-510-165 Postpartum 1 Credit

Postpartum focuses on the normal postpartum period of pregnancy. The learner will gain an understanding of the normal events of the entire postpartum period, assess for deviations from normal and identify appropriate response.

Prerequisites:
Antepartum Theory (10-510-160)
Antepartum Lab (10-510-161)

10-510-166 Neonate 1 Credit

Neonate focuses on the normal newborn period, including breastfeeding. The learner will gain an understanding and be able to assess for normal newborn physical and behavioral characteristics and identify common complications affecting the neonate.

Prerequisite:
Antepartum Theory (10-510-160)
Antepartum Lab (10-510-161)

10-510-167 Midwife Clinic 4**2 Credits**

Lecture Hours: 0 / Occupational Hours: 144

Births: 10 / Prenatals: 10 / Initial Prenatals: 3 / Newborn Exams: 10

Postpartum Visits: 5 / All as Assistant under Supervision

The learner focuses on development and skills for education and counseling in the uncomplicated intra and postpartum periods in a supervised clinical setting progressing into a primary care role using the Midwives Model of Care. The learner will begin to develop management skills for the complicated client during the antepartum period.

Credit for Prior Learning Option: Credential Notes: Current Certified Professional Midwife (CPM) certification. Visit the SWTC eCampus Bookstore for book costs and ISBNs.

Prerequisite:

Midwife Clinic 3 (10-510-163)

10-510-168 Midwife Clinic 5**2 Credits**

Lecture Hours: 0 Occupational Hours: 144

Births: 5 / Prenatals: 25 / Initial Prenatals: 8 / Newborn Exams: 5

Postpartum: 10 / All as Primary under Supervision.

Using the Midwife Model of Care the learner focuses on beginning development of primary management skills for the uncomplicated intra and postpartum periods in a supervised clinical setting. The learner will begin development of management skills for the care and management of the uncomplicated newborn. The learner will develop primary intermediate management skills for the complicated client during the antepartum period.

Credit for Prior Learning Option: Credential Notes: Current Certified Professional Midwife (CPM) certification Visit the SWTC eCampus Bookstore for book costs and ISBNs.

Prerequisite:

Midwife Clinic 4 (10-510-167)

10-510-169 Midwife Clinic 6**2 Credits**

Lecture Hours: 0 / Occupational Hours: 144

Births: 10 / Prenatals: 20 / Initial Prenatals: 6 / Newborn Exams: 10 / Postpartum: 14 / All as Primary under Supervision.

Using the Midwives Model of Care the learner focuses on intermediate development of primary management skills for the uncomplicated intra and postpartum periods in a supervised clinical setting. The learner will develop management skills for the primary care and management of the uncomplicated newborn. The learner will assist the preceptor in advanced primary antenatal care skills of the complicated client. The learner will begin to develop counseling and education management for Well Woman Care.

Credit for Prior Learning Option:

Credential Notes: Current Certified Professional Midwife (CPM) certification. Visit the SWTC eCampus Bookstore for book costs and ISBNs.

Prerequisite:

Midwife Clinic 5 (10-510-168)

10-510-170 Midwife Clinic 7**3 Credits**

Lecture Hours: 0 / Occupational Hours: 216

Births: 10 / Prenatals: 30 / Initial Prenatals: 6 / Newborn Exams: 5

Postpartum: 22 / Preconception visits: 10 / Lactation counseling: 10 / All as Primary under Supervision. Includes 5 Continuity-of-Care Clients (5 PN + Birth + NB Exam+ 2 PP), Exit Exam, Professional Issues exam.

The learner will focus on refinement of all pertinent counseling and management skills for independent direct entry midwifery practice using the Midwives Model of Care.

Credit for Prior Learning Option: Credential Notes: Current Certified Professional Midwife (CPM) certification. Visit the SWTC eCampus Bookstore for book costs and ISBNs.

Prerequisite:

Midwife Clinic 6 (10-510-169)

10-512-125 Intro to Surgical Technology**4 Credits**

Provides the foundational knowledge of the occupational environment. Principles of sterilization and disinfection are learned. Surgical instruments are introduced. Preoperative patient care concepts are simulated. Lab practice is included.

Prerequisites:

General Anatomy & Physiology (10-806-177) AND
Medical Terminology (10-501-101)

10-512-126 Surgical Tech Fundamentals 1**4 Credits**

Focuses on preparing the patient and operating room for surgery. Principles of sterile technique are emphasized as the student moves into the scrub role. Lab practice is included.

Prerequisites:

Medical Terminology (10-501-101)
General Anatomy & Physiology (10-809-177)

10-512-127 Exploring Surgical Issues**2 Credits**

Explores a variety of issues related to surgical technology. Emphasis is placed is on becoming a professional member of the surgical team.

10-512-128 Surgical Tech Fundamentals 2**4 Credits**

Focuses on enhancing surgical technology skills while functioning as a sterile team member. Lab is included.

Prerequisites:

Surgical Fundamentals 1 (10-512-126)
Medical Terminology (10-501-101)

10-512-129 Surgical Pharmacology**2 Credits**

Basic study of drug classifications, care, and handling of drugs and solutions, application of mathematical principles in dosage calculations, terminology related to pharmacology, anesthesia, and drugs used in surgery.

Prerequisites:

Intro to Surgical Technology (10-512-125)
Surgical Fundamentals 1 (10-512-126)

10-512-130 Surgical Skills Application**2 Credits**

Provides a transition from the academic to the clinical setting. Learners integrate the surgical technologist skills as they apply to various surgical procedures.

Prerequisites:

Surgical Technology (10-512-125)
Surgical Fundamentals 1 (10-512-126)

10-512-131 Surgical Interventions 1**4 Credits**

Provides the foundational knowledge of surgical core and specialty procedures. Examines the pathophysiology, diagnostic interventions, health sciences, and surgical techniques for a variety of procedures.

Prerequisites:

Surgical Tech Fundamentals 2 (10-512-128)
Surgical Pharmacology (10-512-129)
Surgical Skills Application (10-512-130)

10-512-132 Surgical Technology Clinical 1**3 Credits**

Apply basic surgical theories, principles, and procedural techniques in the operating room. Students begin to function as team members under the guidance of the instructor and authorized clinical personnel.

Prerequisite:

Surgical Tech Fundamentals 2 (10-512-128)
Surgical Skills Application (10-512-130)

10-512-133 Surgical Technology Clinical 2**3 Credits**

Further experience in a clinical setting allows the student to continue to improve technical skills while accepting more responsibilities during surgical procedures.

10-512-135 Surgical Technology Clinical 3 3 Credits

Further experience in a clinical setting allows the student to continue to improve technical skills while accepting more responsibilities during surgical procedures.

Prerequisite:

Surgical Interventions 1 (10-512-131)

Surgical Technology Clinical 2 (10-512-133)

10-512-136 Surgical Technology Clinical 4 3 Credits

During this clinical course the student will function relatively independently. Serves as a transition from a student perspective to an employee by utilizing advanced skills for an entry level Surgical Technologist.

10-512-142 Surgical Interventions II 4 Credits

Expands knowledge of core and specialty surgical procedures by incorporating pathophysiology, diagnostic interventions, health sciences, and surgical techniques.

10-513-109 Blood Bank 4 Credits

Focuses on blood banking concepts and procedures including blood typing, compatibility testing, work ups for adverse reaction to transfusions, disease states and donor activities.

Prerequisites:

Basic Immunology Concepts (10-513-115)

10-513-110 Basic Lab Skills 1 Credit

This course explores health career options and the fundamental principles and procedures performed in the clinical laboratory. You will utilize medical terminology and basic laboratory equipment. You will follow required safety and infection control procedures and perform simple laboratory tests.

10-513-111 Phlebotomy 2 Credits

This course provides opportunities for learners to perform routine venipuncture, routine capillary puncture, and special collection procedures.

10-513-113 QA Lab Math 1 Credit

This course focuses on performing the mathematical calculations routinely used in laboratory settings. You will explore the concepts of quality control and quality assurance in the laboratory.

10-513-114 Urinalysis 2 Credits

This course prepares you to perform a complete urinalysis which includes physical, chemical, and microscopic analysis. You will explore renal physiology and correlate urinalysis results with clinical conditions.

Prerequisite:

Basic Lab Skills (10-513-110)

General A&P (10-806-177)

10-513-115 Basic Immunology Concepts 2 Credits

This course provides an overview of the immune system including laboratory testing methods for diagnosis of immune system disorders, viral and bacterial infections.

Co-requisite:

Basic Lab Skills (10-513-110)

General A&P (10-806-177)

10-513-116 Clinical Chemistry 4 Credits

Introduces clinical chemistry techniques and procedures for routine analysis using photometric, potentiometric and separation techniques. Topics in this course include pathophysiology and methodologies for carbohydrates, lipids, proteins, renal function and blood gas analysis. Additional topics include hepatic, cardiac markers, tumor markers, endocrine function, miscellaneous body fluids, toxicology, enzymes and electrolytes.

Prerequisites:

Intro to Biochemistry (10-806-186)

10-513-120 Basic Hematology 3 Credits

This course covers the theory and principles of blood cell production and function and introduces you to basic practices and procedures in the hematology laboratory.

Prerequisite:

Basic Lab Skills (10-513-110)

General A&P (10-806-177)

10-513-121 Coagulation 1 Credit

This course introduces the theory and principles of coagulation and explores mechanisms involved in coagulation disorders. Emphasis is placed upon laboratory techniques used to diagnose disease and monitor treatment.

Prerequisite:

Basic Lab Skills (10-513-110)

General A&P (10-806-177)

10-513-130 Advanced Hematology 2 Credits

This course explores mechanisms involved in the development of hematological disorders. Emphasis is placed upon laboratory techniques used to diagnose disorders and monitor treatment.

Prerequisite:

Basic Hematology (10-513-120)

10-513-133 Clinical Microbiology 4 Credits

This course presents the clinical importance of infectious diseases with emphasis upon the appropriate collection, handling and identification of clinically relevant bacteria. Disease states, modes of transmission and methods of prevention and control, including antibiotic susceptibility testing will also be discussed.

Prerequisite:

Microbiology (10-806-197)

10-513-140 Advanced Microbiology 2 Credits

This course provides an overview of acid fast organisms, fungi, parasites, and anaerobic bacteria. The organisms, their pathophysiology, epidemiology, the diseases and conditions that they cause, laboratory methods of handling, culturing and identification will be discussed.

Prerequisite:

Clinical Microbiology (10-513-133)

10-513-141 Pre-Clinical Experience 2 Credits

This course provides a comprehensive theory review prior to the start of the clinical experience. Students also engage in professional development activities including communication skills and continuing education requirements.

Prerequisite:

Clinical Microbiology (10-513-133)

10-513-151 Clinical Experience 1 3 Credits

In this clinical you will practice the principles and procedures of laboratory medicine as an entry level Clinical Laboratory Technician in a clinical laboratory setting. You will learn to operate state of the art instruments and report results on Laboratory Information Systems.

Prerequisites:

Advanced Hematology (10-513-130)

Clinical Chemistry (10-513-116)

10-513-152 Clinical Experience 2 4 Credits

Provides continuing practice for the principles and procedures of laboratory medicine as an entry level Clinical Laboratory Technician in a clinical laboratory setting. You will learn to operate state of the art instruments and report results on laboratory Information Systems.

Prerequisite:

Advanced Hematology (10-513-130)

Clinical Chemistry (10-513-116)

10-513-170 Introduction to Molecular Diagnostic 2 Credits

Introduces the principles and application of molecular diagnostics in the clinical laboratory.

Prerequisites:

Clinical Microbiology (10-513-133)

10-513-180 Body Fluids Analysis 1 Credit

Covers principles and procedures related to laboratory analysis of body fluids, including serous fluids, cerebral spinal fluid, synovial fluid, and bronchoalveolar lavage (BAL) fluid. The major emphasis of the course is hematologic analysis, including cell counts and differentials. The completion of case studies allows the student to correlate laboratory results with disease states.

Prerequisite:

Basic Hematology (10-513-120)

10-513-184 HACCP Training 2 Credits

This course provides an introduction to HACCP (Hazard Analysis and Critical Control Points) for food processors. The relationship between food safety and HACCP will be discussed in the food manufacturing setting. The principles of HACCP will be explored. HACCP plans, implementation and plan maintenance will be developed in order to prevent foodborne illness. Upon successful completion of the course, students will receive a certificate of completion.

Prerequisite:

Manufacturing Practices for Food Industry (10-513-188)

10-513-187 Lab Science Practicum 2 Credits

In this experiential course you will practice the principles and procedures of laboratory processes required in the food and dairy industry. You will become familiar with industry standards and practices related to quality assurance and safety while working in a laboratory setting. You will learn to operate state of the art instruments and report results per industry protocols.

Prerequisites:

Manufacturing Practices for Food Industry (10-513-188)

10-513-188 Manufacturing Practices for Food Industry 1 Credit

This course focuses on the Good Manufacturing Practices (GMP's) as they are defined in Part 110 of Title 21 of the Code of Federal Regulation for the food industry. You will be introduced to each GMP requirements and explore ways food manufacturers can establish process and product control to meet the intent of each GMP. You will also discuss the consequences of failing to meet and maintain compliance with the GMP's. This course does not replace the mandatory annual GMP training required for workers already employed in a regulated production facility.

10-520-101 Introduction to Human Services 3 Credits

Students investigate the various roles and responsibilities of human service providers. Students examine the history of helping and its influence on contemporary programs and policies. Students explore the challenges and dilemmas confronting human service providers as well as current trends and controversies. Because effective human service providers are aware of their own values and biases, students reflect on their thoughts, beliefs, and attitudes about working with diverse populations.

10-520-102 Ethics for the Profession 3 Credits

Students demonstrate their understanding of the Ethical Standards of Human Service Professionals through reflection, class discussion, and case studies. Students apply a model for ethical decision-making to real-world scenarios. Students examine the ethical issues involved in current controversies that affect human services.

Prerequisite:

Introduction to Human Services (10-520-101)

10-520-103 Issues In ATODA 3 Credits

Students examine the impact of legal and illegal drug use upon individuals and society. Students analyze the physiological and psychological effects of drugs. Students identify local resources for ATODA services and investigate current treatment strategies. Students reflect upon their attitudes and values about drug use, and how these beliefs may influence their work as human service providers.

Prerequisite:

Introduction to Human Services (10-520-101)

10-520-104 Community Resources and Services 3 Credits

Students identify programs and services provided by local human service agencies, through presentations by guest speakers, site visits, and independent research. Students create a resource file. Students implement a service project to address an unmet need in the community.

10-520-105 Interviewing and Counseling Techniques 3 Credits

Students demonstrate entry-level interviewing skills through role-plays and simulations. Students apply the strengths perspective and solution-focused techniques to client interactions.

Prerequisite:

Introduction to Human Services (10-520-101)

10-520-106 Issues of Gerontology 3 Credits

Students examine the challenges faced by individuals and society as human longevity increases. Students explore the issues of concern to older adults: ageism, physical and mental health, finances, relationships, living situations, and long-term/end-of-life care. Students examine their attitudes and beliefs about working with elders. Students identify local providers of services for older adults.

Prerequisite:

Introduction to Human Services (10-520-101)

Ethics for the Profession (10-520-102)

10-520-107 Disability Studies 3 Credits

Students examine disability as a social construct created by the non-disabled community. Students analyze the barriers that prevent many people with disabilities from full participation in society. Students identify the causes and characteristics of various disabling conditions. Students reflect on their attitudes and beliefs about working with people with disabilities. Students investigate resources for people with disabilities as well as strategies for increasing inclusion.

Prerequisites:

Ethics for the Profession (10-520-102)

Community Resources & Services (10-520-104)

10-520-108 Methods of Social Casework 3 Credits

Students develop skills in several areas of the human services profession including case management, crisis intervention, documentation, and grant writing.

Prerequisite:

Interviewing & Counseling Techniques (10-520-105)

Corequisite:

Professional Documentation in Human Services (10-520-109)

10-520-109 Professional Documentation in Human Services 3 Credits

Students document client information in accordance with professional guidelines using written, recorded and role-played case studies. Students create cover letters, memos, electronic correspondence, and a grant proposal.

Prerequisites:

Written Communication (10-801-195) AND

Interviewing & Counseling Techniques (10-520-105)

Corequisite:

Methods of Social Casework (10-520-108)

10-520-112 Children, Youth, & Family 3 Credits
Students will explore the issues and concerns affecting the family system. Students will develop strategies for working effectively with families. Students will learn about child abuse/neglect investigations, foster care, and community-based interventions with children and adolescents. Students will examine models of practice for working with at-risk youth and strengthening families.

Prerequisites:
Ethics for the Profession (10-520-102)
Community Resources & Services (10-520-104)

10-520-121 Field Study I 4 Credits
Students gain on-the-job experience through placements at local human service agencies. Students examine their progress towards learning goals through reflection, discussion, and supervision. Students discuss their experiences, challenges, ethics, and boundary issues during the weekly seminar. Students are not paid for their time in the field.

Prerequisites:
Ethics for the Profession (10-520-102)
Issues in ATODA (10-520-103)

10-520-122 Field Study II 4 Credits
Students demonstrate advanced skills and techniques used in the field. Students examine their progress toward learning goals through reflection, discussion, and supervision. Students discuss their experiences, challenges, ethics, and boundary issues during the weekly seminar. Students are not paid for their time in the field.

Prerequisite:
Field Study I (10-520-121)

10-524-139 PTA Patient Interventions 4 Credits
An introduction to basic skills and physical therapy interventions performed by the physical therapist assistant.

10-524-140 PTA Professional Issues 1 2 Credits
Introduces the history and development of the physical therapy program, legal and ethical issues, the interdisciplinary health care team, and professional communication skills.

10-524-142 PTA Therapeutic Exercise 3 Credits
Provides instruction on the implementation of a variety of therapeutic exercise principles. Learners implement, educate, adapt, and assess responses to therapeutic exercises.

Prerequisite:
PTA Applied Kinesiology 1 (10-524-156)

10-524-143 PTA Biophysical Agents 4 Credits
Develops the knowledge and technical skills necessary to perform numerous therapeutic modalities likely to be utilized as a PTA.

Prerequisite:
PTA Patient Interventions (10-524-139)

10-524-144 PTA Princ of Neuro Rehab 4 Credits
Integrates concepts of neuromuscular pathologies, physical therapy interventions, and data collection in patient treatment.

Prerequisites:
PTA Patient Interventions (10-524-139)
PTA Applied Kinesiology 2 (10-524-157)

10-524-145 PTA Princ of Musculo Rehab 4 Credits
Integrates concepts of musculoskeletal pathologies, physical therapy interventions, and data collection in patient treatment.

Prerequisite:
PTA Applied Kinesiology 2 (10-524-157)

10-524-146 PTA Cardio & Integ Mgmt 3 Credits
Integrates concepts of cardiopulmonary and integumentary pathologies, physical therapy interventions, and data collection in patient treatment.

Prerequisites:
PTA Patient Interventions (10-524-139)
PTA Applied Kinesiology 2 (10-524-157)

10-524-147 PTA Clinical Practice 1 2 Credits
Provides a part-time clinical experience to apply foundational elements, knowledge, and technical skills pertinent to physical therapy practice.

Prerequisites:
PTA Applied Kinesiology 1 (10-524-156)

10-524-148 PTA Clinical Practice 2 3 Credits
Provides another part-time clinical experience to apply foundational elements, knowledge, and technical skills required of the entry level physical therapist assistant in various practice settings.

Prerequisites:
PTA Princ of Neuro Rehab (10-524-144)
PTA Clinical Practice (10-524-147)

10-524-149 PTA Rehab Across the Lifespan 2 Credits
A capstone course that integrates concepts of pathology, physical therapy interventions and data collection across the lifespan. In addition the PTA's role in health, wellness, and prevention; reintegration, and physical therapy interventions for special patient populations will be addressed.

Prerequisites:
PTA Princ of Neuro Rehab (10-524-144)
PTA Princ of Musculo Rehab (10-524-145)

10-524-150 PTA Professional Issues 2 2 Credits
Incorporates professional development, advanced legal and ethical issues, healthcare management and administration, and further development of professional communication strategies.

Prerequisites:
PTA Professional Issues (10-524-140)

10-524-151 PTA Clinical Practice 3 5.00
Provides a full-time clinical experience to apply foundational elements, knowledge, and technical skills required of the entry level physical therapist assistant in various practice settings.

Prerequisites:
PTA Princ of Neuro Rehab (10-524-144)
PTA Princ of Musculo Rehab (10-524-145)

10-524-156 PTA Applied Kinesiology 1 4 Credits
Introduces basic principles of musculoskeletal anatomy, kinematics, and clinical assessment. Students locate and identify muscles, joints, and other landmarks of the lower quadrant in addition to assessing range of motion and strength. Integrates analysis of gait.

Prerequisite:
Accepted into Physical Therapist Assistant Program (10-524-1)

10-524-157 PTA Applied Kinesiology 2 3 Credits
Applies basic principles from PTA Applied Kinesiology 1 to the axial skeleton and upper quadrant including location and identification of muscles, joints and other landmarks. Assess range of motion and strength of the axial skeleton and upper quadrant. Integrates analysis of posture.

Prerequisites:
General Anatomy & Physiology, (10-806-177)
PTA Applied Kinesiology 1, (10-524-156)
PTA Patient Interventions, (10-524-139)
PTA Professional Issues 1, (10-524-140)

10-530-110 Introduction to Cancer Registry Management 3 Credits
Introduces cancer registries: hospital and central registries, as well as legal issues, confidentiality, types of registries, data usage, other disease registries, and registry operations and functions.

Prerequisites:

Foundations of HIM (10-530-162)

Advanced Anatomy & Physiology (10-806-179)

10-530-111 Cancer Disease Management 4 Credits

Introduces the pathophysiology of cancer and the study of oncology disease processes. Diagnostic and staging procedures include lab, pathology, radiography, and surgical procedures with treatment modalities to include surgery, chemotherapy, radiation therapy, immunotherapy, etc., with emphasis on the major sites of cancer, clinical trials, and research protocols.

Prerequisites:

Medical Terminology (10-501-101)

Advanced Anatomy & Physiology (10-806-179)

10-530-112 Oncology Coding and Staging 4 Credits

Introduces oncology coding and staging systems with a general overview of the International Classification of Diseases for Oncology terminology and classification system, and focuses on coding clinical information from medical records: coding diagnosis, procedures, sequencing, and coding conventions, staging and disease concepts used by physicians and cancer surveillance organizations to determine treatment and survival.

Prerequisites:

Introduction to Cancer Registry Management (10-530-110)

Cancer Disease Management (10-530-111)

Advanced Anatomy & Physiology (10-806-179)

10-530-113 Cancer Statistics and Epidemiology 3 Credits

Introduces cancer statistics, describes and analyzes epidemiology, cancer surveillance, annual reporting preparation, presentation of cancer data, physician, patient, follow-up resources and activities.

Prerequisites:

Introduction to Cancer Registry Management (10-530-110)

Cancer Disease Management (10-530-111)

Advanced Anatomy & Physiology (10-806-179)

Written Communications (10-801-195)

Oral/Interpersonal Communication (10-801-196)

10-530-114 Abstracting Principles and Practice I 3 Credits

Introduces principles of cancer registry abstracting, identifies and selects appropriate clinical information from medical records in alignment with cancer regulatory core data item requirements: recording, coding, and staging site specific cancer information using manual and computerized applications.

Prerequisites:

Introduction to Cancer Registry Management (10-530-110)

Cancer Disease Management (10-530-111)

Advanced Anatomy & Physiology (10-806-179)

10-530-115 Cancer Patient Follow-up 2 Credits

Focuses on cancer patient follow-up methodologies, ethical issues, confidentiality, identification of second primaries, recurrence, and spread of disease, survival data with physician and patient follow up resources and activities.

Prerequisites:

Oncology Coding and Staging (10-530-112)

Cancer statistics and Epidemiology (10-530-113)

Abstracting Principles and Practice I (10-530-114)

10-530-116 Abstracting Principles and Practice II 3 Credits

Applies principles of cancer registry abstracting, identifies and selects appropriate clinical information from medical records in alignment with cancer registry core data requirements: recording, coding, and staging site specific cancer information using manual and computerized applications.

Prerequisites:

Abstracting Principles and Practice I (10-530-114)

Advanced Anatomy & Physiology (10-806-179)

Intro to Cancer Registry Management (10-530-110)

Cancer Disease Management (10-530-111)

Oncology Coding and Staging (10-530-112)

Cancer Statistic & Epidemiology (10-530-113)

10-530-117 Cancer Registry Management Practicum 3 Credits

Experiential learning in a cancer registry setting to gain hands-on experience of all aspects of registry organizations, operations, and protocols. Supervised clinical experience performing tasks in registry management, quality improvement, and assessment.

Prerequisites:

Oncology Coding and Staging (10-530-112)

Cancer statistics and Epidemiology (10-530-113)

Abstracting Principles and Practice I (10-530-114)

Intro to Health Informatics (10-530-164)

Introduction to Diversity (10-809-172)

Introduction to Psychology (10-809-198)

10-530-118 CTR Prep 1 Credit

Prepares the student for the Certified Tumor Registrar (CTR) examination. Students will review the CTR Certification Examination Candidate Handbook and complete the exam application, organize open-book resources and study tools, prepare for the exam environment, and complete timed practice quizzes and exams.

(Note: Student must have already completed or have concurrent enrollment in 10-530-115, 10-530-116, 10-530-117, and 10-530-161).

Prerequisites:

Oncology Coding and Staging (10-530-112)

Cancer statistics and Epidemiology (10-530-113)

Abstracting Principles and Practice I (10-530-114)

Intro to Health Informatics (10-530-164)

10-530-159 Health Revenue Management 3 Credits

Prepares learners to compare and contrast health care payers, evaluate the reimbursement cycle and compliance with regulations. Learners assign payment classifications with entry level proficiency using computerized encoding and grouping software.

Pre-requisites:

Foundations of HIM (10-530-162)

ICD Diagnosis Coding (10-530-197)

ICD Procedure Coding (10-530-199)

Co-requisite:

10-530-184 CPT Coding

10-530-161 Health Quality Management 3 Credits

Explores the programs and processes used to manage and improve healthcare quality. Addresses regulatory requirements as related to performance measurement, assessment, and improvement, required monitoring activities, risk management and patient safety, utilization management, and medical staff credentialing. Emphasizes the use of critical thinking and data analysis skills in the management and reporting of data.

Note: HIT program students must have already completed or have concurrent enrollment in Healthcare Stats and Analytics (10-530-163).

Prerequisites:

Foundation of HIM (10-530-162)

10-530-162 Foundations of HIM **3 Credits**
Introduces learners to the healthcare delivery system and the external forces that influence healthcare delivery. Sets an understanding for the expectations and standards related to professional ethics, confidentiality and security of health information. Differentiates the use and structure of healthcare data elements, data standards, and the relationships between them. Prepares learners to collect and maintain health data to ensure a complete and accurate health record.

Note: Students must have already completed or have concurrent enrollment in Digital Literacy for Healthcare (10-501-107).

10-530-164 Intro to Health Informatics **3 Credits**
Emphasizes the role of information technology in healthcare through an investigation of the electronic health record (EHR), business, and health information software applications. Learners will develop skills to assist in enterprise information management and database architecture design and implementation.

Prerequisites:
Digital Literacy for Healthcare (10-501-107)
Foundations of HIM (10-530-162)

10-530-165 Intermediate Coding **3 Credits**
Prepares students to assign ICD and CPT/HCPCS codes supported by medical documentation and official coding guidance to support appropriate reimbursement. Students will participate in CDI activities, including preparation of appropriate physician queries in accordance with compliance guidelines.

Pre-requisite: 10-530-197 ICD Diagnosis Coding
Co-requisite: 10-530-184 CPT Coding

Note: Students must have already completed or have concurrent enrollment in Healthcare Revenue Management (10-530-159) and ICD Procedure Coding (10-530-199).

10-530-166 HIT Capstone **1 Credit**
Prepares the student to enter the workforce. Topics may include resume and cover letter writing, interviewing skills, portfolio preparation, and RHIT examination preparation.

Corequisites:
Health Quality Management (10-530-161)
Management of HIM Resources (10-530-167)

Prerequisite:
Intermediate Coding (10-530-165)

10-530-167 Management of HIM Resources **3 Credits**
Examines the principles of management to include planning, organizing, human resource management, directing, and controlling as related to the health information department.

Prerequisite:
Foundations of HIM (10-530-162)
Intro to Health Informatics (10-530-164)

10-530-178 Healthcare Law & Ethics **2 Credits**
Examines regulations for the content, use, confidentiality, disclosure, and retention of health information. An overview of the legal system and ethical issues are addressed.

Prerequisite:
Foundations of HIM (10-530-162)

10-530-182 Human Diseases for Hlth Profes **3 Credits**
Prepares learners to interpret clinical documentation that they will encounter in a variety of healthcare settings. Emphasis is placed on understanding the common disorders and diseases of each body system to include the etiology (cause), signs and symptoms, diagnostic tests and results, and medical treatments and surgical procedures.

Prerequisites:
Medical Terminology (10-501-101)
General Anatomy & Physiology (10-806-177) or
Basic Anatomy (10-806-189)

10-530-184 CPT Coding **3 Credits**
Prepares learners to assign CPT codes, supported by medical documentation, with entry level proficiency. Learners apply CPT instructional notations, conventions, rules, and official coding guidelines when assigning CPT codes to case studies and actual medical record documentation.

Prerequisites:
Medical Terminology (10-501-101)
General Anatomy & Physiology (10-806-177) or
Basic Anatomy (10-806-189)

10-530-196 Professional Practice **3 Credits**
Applies previously acquired skills and knowledge by means of clinical experiences in the technical procedures of health record systems and discussion of clinical situations. Student may participate in a supervised clinical experience in healthcare facilities.
Note: Students must have already completed or have concurrent enrollment in Health Quality Management (10-530-161) and Management of HIM Resources (10-530-167).

Prerequisites:
Intro to Health Informatics (10-530-164)
Intermediate Coding (10-530-165)

10-530-197 ICD Diagnosis Coding **3 Credits**
Prepares students to assign ICD diagnosis codes supported by medical documentation with entry level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD diagnosis codes to case studies and actual medical record documentation.

Note: Students must have already completed or have concurrent enrollment in Human Diseases for the Health Professions (10-530-182).

Prerequisites:
Medical Terminology (10-501-101)
General Anatomy & Physiology (10-806-177) or
Basic Anatomy (10-806-189)

10-530-199 ICD Procedure Coding **2 Credits**
Prepares students to assign ICD procedure codes supported by medical documentation with entry level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD procedure codes to case studies and actual medical record documentation.

Corequisites:
Human Diseases for the Health Professions (10-530-182)

10-531-105 Emergency Medical Technician 1 **3 Credits**
This course provides the foundational knowledge for future Emergency Medical Technicians and Emergency Medical Responders. Topics include: basic human anatomy, performing a patient assessment, traumatic injury management, airway management, and Basic Life Support cardiac resuscitation. Upon successful completion, candidates will be eligible to participate in the National Registry of EMTs Emergency Medical Responder exams for Wisconsin EMR certification.

10-531-106 Emergency Medical Technician 2 3 Credits
This course provides the student with the skills to perform patient assessment, stabilize/immobilize injuries and provide basic treatment of medical emergencies at the Emergency Medical Technician Basic (EMT) level. Successful completion of this course makes you eligible to attempt the NREMT cognitive and psychomotor exam at the EMT level.
Co-requisite: Emergency Medical Technician 1 (30-531-305) or equivalency.
Co-requisite: Emergency Medical Technician 1 (10-531-105) or equivalency.

10-543-101 Nursing Fundamentals 2 Credits
Students learn basic nursing concepts that the beginning nurse will need to provide care to diverse patient populations. Learners explore current and historical issues influencing nursing. The nursing process is introduced as a framework for organizing the care of patients with alterations in cognition, elimination, comfort, mobility, integument, and fluid/electrolyte balance, integument, and grief/loss.

Pre-requisite:
General Anatomy & Physiology (10-806-177) OR
Anatomy & Physiology I (20-806-207)

Corequisite:
Nursing Skills (10-543-102)

10-543-102 Nursing Skills 3 Credits
Students develop clinical and physical assessment skills across the lifespan, including; mathematic calculations and conversions related to clinical skills, blood pressure assessment, aseptic technique, wound care, oxygen administration, tracheotomy care, suctioning, management of central systems, basic medication administration, glucose testing, enemas, ostomy care, and catheterization. Competence obtaining a health history and basic physical assessment skills using a body systems approach is gained.

Pre/Corequisite:
Complete Math Review for Health Occupations (Knox Learning Center)
General Anatomy & Physiology (10-806-177) OR
Anatomy & Physiology I (20-806-207)

Corequisite:
Nursing Fundamentals (10-543-101)

10-543-103 Nursing Pharmacology 2 Credits
Students are introduced to the principles of pharmacology, including drug classifications, effects on the body, and nursing process when administering medications.

Pre/Corequisite:
General Anatomy & Physiology (10-806-177) OR
Anatomy & Physiology I (20-806-207)
Nursing Fundamentals (10-543-101) AND
Nursing Skills (10-543-102)

10-543-104 Nursing Intro Clinical Practice 2 Credits
Students learn basic nursing skills and application of the nursing process in meeting the needs of diverse clients including the formation of nurse-client relationships, communication, data collection, documentation, and medication administration.

Corequisite:
Nursing Pharmacology (10-543-103)

10-543-105 Nursing Health Alterations 3 Credits
Students advance their concepts of health and illness by applying theories of nursing to the care of clients through the lifespan, and utilizing problem solving and critical thinking. Learners are given an opportunity to study conditions affecting different body systems and apply therapeutic nursing interventions. Students are introduced to the concepts of leadership, team building, and scope of practice.

Prerequisite:
Nursing Pharmacology (10-543-103)

10-543-106 Nursing Health Promotion 3 Credits
Students explore topics related to health promotion and nursing care in the context of the family, such as reproductive issues, pregnancy, labor and delivery, postpartum, the newborn, and the child. Recognizing the spectrum of healthy families, students learn to discern patterns associated with adaptive and maladaptive behaviors applying mental health principles that support healthy lifestyle choices, including nutrition, exercise, stress management, empowerment, and risk reduction practices. Learners study family dynamics, functions, discipline styles, and stages of development.

Prerequisite:
Nursing: Intro to Clinical Practice (10-543-104)
Nursing Pharmacology (10-543-103)
Corequisite: Developmental Psychology (10-809-188)

10-543-107 Nursing Clinical Care Across the Lifespan 2 Credits
Students apply nursing concepts and therapeutic interventions to clients across the lifespan. Learners are introduced to concepts of teaching, and learning, in various care settings.

Prerequisite:
Nursing: Intro to Clinical Practice (10-543-104)

10-543-108 Intro to Clinical Care Management 2 Credits
Students apply nursing concepts and therapeutic nursing interventions to groups of clients while using leadership, management, and team building skills.

Prerequisite:
Nursing: Intro to Clinical Practice (10-543-104)

10-543-109 Nursing Complex Health Alterations I 3 Credits
Students expand knowledge from previous courses in caring for clients with alterations in cardiovascular, respiratory, endocrine, and hematologic systems as well as clients with fluid/electrolyte and acid-base imbalance, and alterations in comfort.

Prerequisite:
Nursing Health Promotion (10-543-106)
Nursing: Intro Clinical Care Management (10-543-108)

10-543-110 Mental Health & Community Concepts 2 Credits
Students explore the delivery of community and mental health care, including the specific health needs of individuals, families, and groups. Learners focus on diverse and at-risk populations, adaptive/maladaptive behaviors and specific mental health disorders. Community resources are examined in relation to specific types of support offered to racial, ethnic, economically diverse individuals and groups.

Prerequisite: Nursing Health Promotion (10-543-106)
Corequisite: Intro to Psychology (10-809-198)

10-543-111 Nursing Intermediate Clinical Practice 3 Credits
Students advance clinical nursing skills by working with clients with complex health care needs. Learners further develop skills to manage multiple clients and priorities. Using the nursing process, students will gain experience in adapting nursing practice to meet the needs of clients with diverse needs and backgrounds.

Prerequisite:
Nsg: Intro Clinical Care Mgt (10-543-108)

10-543-112 Nursing Advanced Skills 1 Credit
Students develop advanced clinical skills, including advanced IV skills, blood product administration, chest tube systems, basic EKG interpretation and nasogastric/feeding tube insertion.

Prerequisites:
Nursing Health Promotion (10-543-106)
Nsg: Intro Clinical Care Mgt (10-543-108)

10-543-113 Nursing Complex Health Alterations II 3 Credits
Learners expand knowledge and skills from previous courses in caring for clients with alterations in the immune, neurosensory, musculoskeletal, gastrointestinal, hepatobiliary, renal/urinary, and the reproductive systems. Students also focus on the management of care of clients with high risk perinatal conditions, high risk newborns, and the ill child. Synthesis and application of previously learned concepts will be evident in the management of clients with critical/life-threatening situations.

Prerequisite:
Nsg: Complex Health Alterations 1 (10-543-109)

10-543-114 Nursing Management & Professional Concepts 2 Credits
Students explore nursing management and professional issues related to the role of the RN. Emphasis is placed on preparing for RN practice.

Prerequisite:
Nsg: Complex Health Alterations 1 (10-543-109)
Nsg: Interned Clin Practice (10-543-111)

10-543-115 Nursing Advanced Clinical Practice 3 Credits
Students integrate concepts from all previous courses in the management groups of clients facing complex health alterations. Students will have the opportunity to further develop critical thinking skills using the nursing process in making clinical decisions. Continuity of care through interdisciplinary collaboration is emphasized.

Prerequisite:
Nsg: Complex Health Alterations 1 (10-543-109)
Nsg: Interned Clin Practice (10-543-111)

10-543-116 Nursing Clinical Transition 2 Credits
Students integrate knowledge learned in previous courses in transitioning to the role of the graduate nurse by engaging in relatively independent clinical decisions, delegation, and collaboration to achieve client and organizational outcomes. Continued professional development is fostered.

Prerequisite:
Nsg: Complex Health Alterations 1 (10-543-109)
Nsg: Interned Clin Practice (10-543-111)

10-543-159 LPN to RN Bridge 3 Credits
Students will transition from the role of Practical Nurse to that of a student preparing for the role of Registered Nurse. Students will validate their learning through participation in a variety of learning activities, including demonstration of nursing skills and clinical experiences.

10-620-101 DC and AC Fundamentals 5.00
Students will explore and apply the principles of DC and AC electricity and components. Major topics of study include: electrical safety, direct current (DC) and its characteristics, resistors and resistance, electrical units of volts, ohms, amps, and watts and their relationships in series, parallel, and series-parallel circuits, test and measurement tools and techniques, circuit analysis using common electrical laws and theorems, alternating current (AC) and its characteristics, capacitors and inductors and the effects of inductance and capacitance in AC circuits. In addition, basic soldering/desoldering, breadboarding, and troubleshooting skills will be practiced.

10-620-107 Hydraulics and Pneumatics 3 Credits
Students examine the principles of fluidic and pneumatic power. Students investigate the operation and applications of devices used in these systems along with the symbolic representation of these devices. Utilizing this information the student will build, analyze, and troubleshoot hydraulic and pneumatic circuits in a laboratory setting.

Prerequisites:
College Technical Math 1A (10-804-113) or
College Technical Math 1 (10-804-115)

10-620-117 Robotics 3 Credits
Students will use the RoboWare Millennium Edition software to program the Mitsubishi RV-Mx and RV-Ex series of industrial robots to perform a variety of specific tasks. Major topics of study include: robot overview, robot components, robot applications, and robot programming using Roboware Millennium Edition software.

Prerequisite:
Fundamentals of Embedded Systems (10-620-157)

10-620-121 Mechanics and Materials 4 Credits
Learners explore the basic concepts of simple mechanical drives and drive components. Major topics include: V-belt drives, chain drives, and gear drives. Learners install and align mechanical drive system components to specified tolerances using a variety of common and specialized hand tools and measuring instruments including dial calipers, micrometers, levels, and rules.

10-620-123 Construction Electrical Wiring I 1 Credit
Maintaining compliance with the Wisconsin and National Electrical Codes for adhering to OSHA Sub Part S, the student installs, troubleshoots, and maintains electrical equipment for the following: Connection to electrical utility, distribution throughout facility, and control of electrical power.

Co-requisite:
DC/AC Fundamentals (10-620-101)

10-620-124 Welding for Maintenance 2 Credits
The student creates weldments in flat, vertical, horizontal, and overhead positions; these weldments will utilize SMAW, MIG, TIG, brazing and oxy-fuel. All operations will adhere to AWS Code.

10-620-126 Industrial Electrical Wiring 2 Credits
The students design, install, and troubleshoot electrical systems for power distribution and motor control within Industrial environments. All functions adhere to NFPA 79 and the National Electrical Code.

Prerequisite:
Construction Electrical Wiring II(10-620-138)

10-620-131 Electrical Wiring - Basic 1 Credit
Students apply related code applications, OSHA safety standards, and use testing instruments through class participation and simulated field activities. Night class for Plumbing Apprenticeship Program.

10-620-138 Construction Electrical Wiring II 1 Credit
Maintaining compliance with the Wisconsin and National Electrical Codes for adhering to OSHA Sub Part S, the student installs, troubleshoots, and maintains electrical equipment for the following: Connection to electrical utility, distribution throughout facility, and control of electrical power.

Co-requisite:
Construction Electrical Wiring I (10-620-123)

10-620-148 Intro to Motor Controls 2 Credits
Students operate, install, and troubleshoot relay and variable frequency drive control of A/C electric motors found in industrial and commercial applications. Students will learn to develop and read schematics, including ladder logic, wire typical relay applications, test and monitor A/C electrical equipment and troubleshoot equipment as necessary.

Prerequisite:
DC and AC Fundamentals (10-620-101)

10-620-149 Intro to Programmable Controls 2 Credits
Students design, program, operate, and troubleshoot discrete input/ output PLC functions utilizing Allen Bradley Control Logix programming software. Students will develop ladder logic programs on a PC, transfer them to and from a PLC, and monitor PLC operations.

Co-requisites:
Machine Control I-A (10-620-127) or
Intro to Motor Controls (10-620-148)

10-620-150 Advanced Programmable Controls 2 Credits
This course will provide the learner with advanced PLC programming including analog principles and human machine interfaces in conjunction with other advance programming features.

Prerequisites:
Machine Control I-B (10-620-141) or
Intro to Programmable Controls (10-620-149)

10-620-151 Process Control Systems 5.00
Students will explore and apply the fundamental concepts, components, and techniques of industrial process control. Major topics of study include: on-off, proportional, and PID control of level, flow, and temperature processes.

Prerequisite:
DC & AC Fundamentals (10-620-101)

10-620-154 Advanced Calibration Techniques & Analytics 3 Credits
Students will learn industry standard calibration and analytical procedures as it applies to process control. Topics covered include the areas of temperature, pressure, level, and flow.

Prerequisite:
Process Control Systems (10-620-151)

10-620-156 Fiber Optic Cabling Technician 1 Credit
This course will introduce the learner to the essential knowledge, skills, and abilities required to install and configure fiber optic networking infrastructure in an industrial plant setting. Major topics of study include: using light to transmit information, fiber types, fiber preparation, fiber termination, fiber splicing, fiber inspection and testing, and safety issues and procedures unique to the fiber optic industry. Learners will practice the skills necessary to select, install, terminate, splice, inspect, and test fiber optical cables to EIA/TIA standards using industry standard tools and procedures. This course is a recommended preparation activity for those interested in pursuing the Fiber Optics Association (FOA) Certified Fiber Optic Technician (CFOT) written and hands-on certification exam.

10-620-157 Fundamentals of Embedded Systems 1 Credit
Automobiles, smartphones, E-textiles, and the Internet of Things. Embedded systems are at the heart of many of the products that surround us in modern life. In this introductory course the learner will explore the role of the invisible, but key component of embedded systems; the microcontroller. Learners will study the architecture, operation, and programming of a small microcontroller as found in many common consumer and industrial products. Major topics of study include: number systems and codes, digital basics, microcontrollers vs. PCs, and basic microcontroller programming. Learners will practice classroom theory by developing a variety of microcontroller based solutions to solve simulated industrial tasks. Note: Learners enrolled in this course are strongly encouraged to bring a laptop with one available USB port and a minimum of Windows XP to this course.

Prerequisite:
DC & AC Fundamentals (10-620-101)

10-620-159 Introduction to Frequency & Servo Drives 2 Credits
Students operate, wire, program, and troubleshoot variable frequency and servo drives found in industrial and commercial applications. Students will learn to develop and read schematics, wire typical drive applications, troubleshoot and monitor the control of A/C electrical motors.

Prerequisites:
DC & AC Fundamentals (10-620-101)
Intro to Motor Controls (10-620-148)
Intro to Programmable Controls (10-620-149)
Introduction to Networks (10-150-129)

10-620-162 Manual Machine Shop Fundamentals 3 Credits
This course teaches students to set up and operate engine lathes, band saws, milling machines, and hydraulic surface grinders to fabricate within tolerances specified in projects according to prints provided. Students will use and identify machine shop tooling and measurement equipment.

10-620-163 Intro to Mechatronics 1 Credit
Students will learn foundational information and develop hands-on skill in the areas of Mechanical, Electrical, and Control Technology. Topics covered include the areas of pneumatics, electricity, sensors, actuators, and controls.

10-620-164 Intro to Preventative Maintenance 1 Credit
Students will be familiar with industry trends and predictive maintenance techniques, such as, IR thermography, vibration analysis, oil analysis, and ultrasonic.

10-623-110 Lean Concepts 3 Credits
Learners will develop techniques to identify and eliminate non-value-added activities in a process using 5S, TPM, Standard Work, and Mistake Proofing. Learners will explore the characteristics of an organizational culture necessary to support and sustain a lean enterprise.

10-623-112 Lean Six Sigma 3 Credits
Learners will apply the DMAIC (Define, Measure, Analyze, Improve, Control) model. Learners will select a problem and define its parameters by creating a project charter, collect and analyze data to address the defined problem, implement a solution to the defined problem and create a control system to monitor and maintain the improvement. Prerequisite: Introductory Statistics (10-804-189)

10-623-113 Process Mapping/Problem Solving 3 Credits
Learners will utilize the A-3 Problem Solving format to complete projects that address the root cause and improve processes by eliminating waste. Learners will develop micro and macro level process maps such as Operational, Spaghetti, and Cross Functional to identify and remove waste and to improve process flow. Learners will utilize Value Stream Mapping (VSM) techniques to create a current state map to identify waste in a process and develop a future state map to reduce and/or eliminate identified waste.

10-660-101 Introduction to DC/AC 3 Credits
Introduces the concepts of DC and AC power and basic circuits. Using a multimeter, students learn about voltage, current, and resistance in both DC and AC circuits.

10-801-136 English Composition 1 3 Credits
This course is designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing and revising are applied through a variety of activities. Students will analyze audience and purpose, use elements of research and format documents using standard guidelines. Individuals will develop critical reading skills through analysis of various written documents.

10-801-195 Written Communication 3 Credits

Students develop writing skills through prewriting, drafting, revising, and editing. Students complete writing assignments designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Students develop critical reading and thinking skills through the analysis of a variety of written documents.

10-801-196 Oral/Interpersonal Communication 3 Credits

Students demonstrate competency in speaking, verbal and nonverbal communication, and listening skills through individual presentations, group activities and other projects.

10-801-197 Technical Reporting 3 Credits

Students prepare and present oral and written technical reports. Students create, but are not limited to the following reports: lab and field reports, proposals, technical letters and memos, technical research reports, case studies, and oral technical presentations.

10-801-198 Speech 3 Credits

Students explore the fundamentals of effective oral presentations to small and large groups. Students demonstrate competency through topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process.

10-801-199 Communication Techniques/Special Pops 1 Credit

Students will be able to do the hand formations for the alphabet and over 500 signs. In addition, students will be able to interpret and sign simple sentences, identify the characteristics of the deaf culture, American Sign Language (ASL), and the uses of signing in everyday life. There is no prerequisite.

10-804-107 College Mathematics 3 Credits

This course is designed to review and develop fundamental concepts of mathematics in the areas of algebra, geometry, trigonometry, measurement and data. Algebra topics emphasize simplifying algebraic expressions, solving linear equations and inequalities with one variable, solving proportions and percent applications. Geometry and trigonometry topics include; finding areas and volumes of geometric figures, applying similar and congruent triangles, applying Pythagorean Theorem, and solving right triangles using trigonometric ratios. Measurement topics emphasize the application of measurement concepts and conversion techniques within and between U.S. customary and metric system to solve problems. Data topics emphasize data organization and summarization skills, including: frequency distributions, central tendency, relative position and measures of dispersion. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators.

10-804-113 College Technical Math 1A 3 Credits

Topics include: solving linear equations; graphing; percent; proportions; measurement systems; computational geometry; and right triangle trigonometry. Emphasis will be on the application of skills to technical problems. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 1.

10-804-114 College Technical Math 1B 2 Credits

This course is a continuation of College Technical Mathematics 1A. Topics include: performing operations on polynomials; solving quadratic and rational equations; formula rearrangement; solving systems of equations; and oblique triangle trigonometry. Emphasis will be on the application of skills to technical problems. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 1.

10-804-118 Intermediate Algebra with Applications 4 Credits

Students apply algebra with applications. Topics include properties of real numbers, order of operations, algebraic solution for linear equations and inequalities, operations with polynomial and rational expressions, operations with rational exponents and radicals, algebra of inverse, logarithmic and exponential functions.

10-804-123 Math with Business Applications 3 Credits

Students use real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, and apply math concepts to the purchasing/buying process, the selling process, and apply basic statistics to business/consumer applications.

10-804-133 Math & Logic 3 Credits

Students will apply mathematical problem solving techniques. Topics will include symbolic logic, sets, algebra, Boolean algebra, and number bases.

10-804-189 Introductory Statistics 3 Credits

Students display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA.

10-804-195 College Algebra with Applications 3 Credits

Students perform the topics of real and complex number systems, polynomials, exponents, radicals, solving equations and inequalities (linear and nonlinear), relations and functions, systems of equations and inequalities (linear and nonlinear), matrices, graphing, conic sections, sequences and series, combinatorial, and the binomial theorem. This course covers those skills needed for success in Calculus and many application areas on a baccalaureate level.

10-804-196 Trigonometry with Applications 3 Credits

Topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles complex numbers, DeMoivre's Theorem, polar coordinates, and vectors.

Prerequisite:

Intermediate Algebra w/Applications (10-804-118) with a grade of C or better

10-806-109 Fundamentals of Chemistry 2 Credits

Students convert measurements, design tables and graphs, create models, and use the scientific method. Students interpret a model of the atom and use the periodic table. They distinguish physical, chemical, and nuclear changes and identify properties of common compounds. They analyze chemical equations. Students relate technical applications to common chemical reactions. Students describe basic biomolecules.

10-806-134 General Chemistry 4 Credits

Students will explore the fundamentals of chemistry. Topics include the metric system, problem-solving, periodic relationships, chemical reactions, chemical equilibrium, properties of water: acids, bases, and salts: and gas laws.

10-806-143 College Physics 1 3 Credits

Presents the applications and theory of basic physics principles. This course emphasizes problem solving, laboratory investigation and applications. Topics include laboratory safety, unit conversions and analysis, kinematics, dynamics, work, energy, power, temperature, and heat. Pre-requisites: College Technical Math IA (10-804-113) OR (College Algebra with Applications (10-804-195) AND Trigonometry with Apps (10-804-196)) OR High School Pre-Calculus with a grade of C or higher.

10-806-177 General Anatomy & Physiology 4 Credits
Students examine basic concepts of human anatomy and physiology as they relate to health sciences. Students use a body systems approach to analyze the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. They apply basic concepts of whole body anatomy and physiology to make informed decisions as health care professionals and to communicate professionally with colleagues and patients.

Corequisites:

High school chemistry or college chemistry with a minimum grade of C OR Fundamentals of Chemistry (10-806-109)

10-806-179 Adv Anatomy & Physiology 4 Credits
Students study using a body systems approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Students experiment within a science lab including analysis of cellular metabolism, the individual components of body systems such as the nervous, neuromuscular, cardiovascular, and urinary. Students examine homeostatic mechanisms and their relationship to fluid, electrolyte, acid-base balance, and blood. Integration of genetics to human reproduction and development are also included in this course. Students receive instructional delivery within a classroom and laboratory setting.

Prerequisite:

General Anatomy and Physiology (10-806-177) with a C or better.

10-806-186 Intro to Biochemistry 4 Credits
Provides students with skills and knowledge of organic and biological chemistry necessary for application within Nursing and other Allied Health careers. Emphasis is placed on recognizing the structure, physical properties and chemical reactions of organic molecules, body fluids, and acids. Additional emphasis is placed on biological functions and their relationships to enzymes, proteins, lipids, carbohydrates and DNA.

Prerequisites:

High school chemistry or college chemistry with a minimum grade of C, or Fundamentals of Chemistry (10-806-109)

10-806-189 Basic Anatomy 3 Credits
Examines concepts of anatomy and physiology as they relate to health careers. Learners correlate anatomical and physiological terminology to all body systems.

10-806-197 Microbiology 4 Credits
Students examine microbial structure, metabolism, genetics, growth, and the relationship between humans and microorganisms. Students address disease production, epidemiology, host defense mechanisms, and the medical impact of microbes. Students examine the role of microbes in the environment, industry, and biotechnology.

Prerequisite:

General Anatomy and Physiology (10-806-177) with a C or better

10-809-122 Intro to Amer Government 3 Credits
Introduces American political processes and Institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties and public opinion in the political process. Also explores the role of state and national government in our federal system.

10-809-128 Marriage & Family 3 Credits
The learner explores the sociological aspects of marriage and family life in contemporary American society. Emphasis is on the study of cognitive, emotional, and behavioral patterns associated with courtship, love, mate selection, sexuality, and marriage. Moreover, the learner will discuss the life span development in the family life cycle, balancing work and family, and parenting based on the premise that human attitudes, feelings, and behaviors are largely shaped and influenced by philosophy, gender, communication, and personal beliefs. Therefore, success in the institutions of marriage and family require knowledge and skills in the roles of spouse and parent and ways to apply concepts to daily life.

10-809-143 Microeconomics 3 Credits
Students examine the behavior of individual decision makers, primarily consumers and firms. Topics include choices of how much to consume and to produce, the functioning of perfectly and imperfectly competitive markets, the conditions under which markets may fail, and arguments for and against government intervention. The student applies the fundamental tools of economics to real world problems.

Prerequisite:

Economics (10-809-195)OR

Principles of Macroeconomics (20-809-211)

10-809-159 Abnormal Psychology 3 Credits
Students survey the essential features, possible causes, and assessment and treatment of the various types of abnormal behavior from the viewpoint of the major theoretical perspectives in the field of abnormal psychology. Students will be introduced to the diagnosis system of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). In addition, the history of the psychology of abnormality will be traced. Cultural and social perspectives in understanding and responding to abnormal behavior will be explored as well as current topics and issues within abnormal psychology.

10-809-166 Intro to Ethics: Theory & App 3 Credits
The learner will engage in the basics of theoretical foundations of ethical thought. Diverse ethical perspectives will be used to analyze and compare relevant issues. Learners will critically evaluate individual, social and/or professional standards of behavior, and apply a systematic decision-making process to these situations.

10-809-172 Introduction to Diversity Studies 3 Credits
Students draw from several disciplines to reaffirm the basic American values of justice and equality by learning a basic vocabulary, a history of immigration and conquest, principles of transcultural communication, legal liability and the value of aesthetic production to increase the probability of respectful encounters among people. In addition to an analysis of majority/minority relations in a multicultural context, the topics of ageism, sexism, gender differences, sexual orientation, the disabled and the American Disability Act (ADA) are explored. Ethnic relations are studied in global and comparative perspectives.

10-809-188 Developmental Psychology 3 Credits
Developmental Psychology is the study of human development throughout the lifespan. This course explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills will enable students to gain an increased knowledge and understanding of themselves and others.

10-809-195 Economics 3 Credits
Students will develop analytical skills central to how a market-oriented system operates and the factors that influence national economic policy. Students will apply basic concepts and analyses to a variety of contemporary problems and public policy issues. These concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment, and global economic issues.

10-809-196 Intro to Sociology 3 Credits

Students explore the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues.

10-809-197 Contemporary Amer Society 3 Credits

Students examine the network of interdependent social systems which affect learners as employees, family members, and citizens. In this interdisciplinary course, learners will study public policy issues which illustrate how our traditional institutions such as family, education, government, work, and media are being changed by global, political, demographic, multicultural, and technological trends. By exploring contemporary issues, learners will expand their use of creative and critical thinking skills in evaluating information, making decisions, advocating positions, and participating in the democratic process.

10-809-198 Intro to Psychology 3 Credits

Students survey the multiple aspects of human behavior. This involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. The student forms an insightful understanding of the complexities of human relationships in personal, social, and vocational settings

10-809-199 Psychology of Human Relations 3 Credits

Students explore the relationship between the general principles of psychology and our everyday lives. Students are given the opportunity to achieve a deepened sense of awareness of themselves and others. This understanding enables students to improve their relationship with others at work, in the family, and in society.

10-834-110 Elem Algebra With Apps 3 Credits

This course offers traditional algebra topics with applications. Learners develop algebraic problem solving techniques needed for technical problem solving and for more advanced algebraic studies. Topics include linear equations, exponents, polynomials, rational expressions, and roots and radicals. Successful completion of this course prepares learners to succeed in technical mathematics courses.

20-801-204 Intro to Literature 3 Credits

Recommended as a first course in literary analysis, this course introduces students to the major genres of literature and addresses issues related to writing about literature and/or other texts.

Pre-requisites:

Written Communication (10-801-195) OR
English Composition 1 (10-801-136)

20-801-223 English Composition 2 3 Credits

Advanced Composition continues the study of expository writing for students who wish to attain advanced skills in managing the written language. Students learn critical reading and thinking skills, including textual analysis and evaluations.

Prerequisite:

English Composition 1 (10-801-195) OR
Written Communication (10-801-136)

20-804-211 Quantitative Reasoning 4 Credits

This course is intended to develop analytic reasoning and the ability to solve quantitative problems. Topics to be covered may include: construction and interpretation of graphs; descriptive statistics; geometry and spatial visualizations; math of finance; functions and modeling; probability; and logic. Appropriate use of units and dimensions, estimates, mathematical notation and available technology will be emphasized throughout the course. Note: This course satisfies Part A of the Quantitative Reasoning requirement for the UW system and is intended for students who do not plan to take any further mathematics.

Corequisite:

Pathways to Quantitative Reasoning 77-854-701 OR
ACT score 17+ or Accuplacer next generation Arithmetic 255+ OR TABE
11&12 score 4+

20-806-207 Anatomy and Physiology I 4 Credits

Features lectures and laboratory dealing with the human body as an integrated structural and functional unit, including basic anatomical and directional terminology, fundamental concepts and principles of cell biology, histology, integumentary, skeletal, muscular, endocrine, and nervous systems, and the special senses. It includes dissection of various fresh and preserved materials as well as examination of a human cadaver. This course is the first semester of a two-semester sequence.

Corequisite:

High school chemistry or college chemistry with a minimum grade of C, or
Fundamentals of Chemistry (10-806-109)

20-806-209 College Chemistry I 5.00

General college chemistry which includes the topics of measurement, chemical nomenclature, chemical reactions and stoichiometry, atomic structure, gas laws, thermochemistry, chemical bonding and solution chemistry. The course is for students who need the first one of two semesters of what is typically considered freshman university level chemistry for science majors and university transfer students. Laboratory work assists in understanding chemical concepts and developing problem-solving skills.

Co-requisite:

College Algebra(20-804-212)

20-806-234 General Biology 4 Credits

The course examines fundamental principles of biology including cell structure and function, energy production by cells and ecosystems, reproduction and genetics, evolution, ecology and a survey of biodiversity. The class emphasizes application of the scientific method to problem-solving. The course is designed to provide a solid foundation for advanced courses in biology as well as providing scientific literacy for all students.

30-316-301 Introduction to the Meat Industry 1 Credit

This course will give students the opportunity to explore the various aspects of the meat industry. Students will gain a broad understanding of the components that comprise the meat industry. An emphasis will be placed on the history of meat science, the modernization that has occurred throughout history and where we are today.

30-316-302 Humane, Handling, Slaughter, and Packaging 3 Credits

This course explores the transition from muscle to meat. Students will gain in-depth knowledge of the importance and principles of humane pre-slaughter handling and stunning with emphasis on compliance with the Humane Slaughter Act and protection of meat quality and worker safety. Sanitary dressing procedures will be presented with emphasis on meat quality, safety, and compliance with inspection-related regulations. Students will gain knowledge and experience in the fabrication and storage of fresh cuts from common meat animal species.

30-316-303 Processed Meat Manufacturing 3 Credits
This course will focus on the study and practice of commercial meat processing methods including curing, smoking, sausage manufacturing and the manufacturing of ready to serve meat products. The production of common types of processed meat products will be included such as fresh sausages, dry and semi-dry sausages and cured meat products. Emphasis will be given to factors influencing final eating quality and food safety.

30-316-304 Meat Marketing and Merchandising 3 Credits
This course introduces students to the subject of meat retail operations. Students will complete hands-on lab activities, lectures, homework, and field trips to develop the skills necessary to properly price meat products for sale as well as how best to market product through direct and retail outlets. Students will actively practice all aspects of meat production, inventory management, and customer service skills. This, with a focus on sanitation, safety, equipment usage, and product storage and handling should leave students with a comprehensive understanding of the requirements for entry-level meat cutting and clerk positions within butcher shop environments as well as developing sales plans for their own products.

30-316-305 Artisanal Modern Meat Butchery Internship 3 Credits
Students will obtain professional work experience with a cooperating employer in meat production and processing. This experience will occur off campus and students will be expected to spend a set amount of time with their assigned employer.

30-504-420 Police Concepts 5.00
Through classroom lecture and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following WI Department of Justice 720 Academy Phase I curriculum framework topics: Academy Orientation, Fundamentals of Criminal Justice, Ethics I, Professional Communication I, Constitutional Law I, Interviews, Report Writing I, Critical Thinking & Decision Making, Basic Response (RESPOND), Radio Procedures, Intro to TraCS, Traffic Law Enforcement I, First Aid CPR/AED, Cultural Competence, Agency Policy, Crimes I, Officer Wellness, and Phase I Fitness.

Pre-requisite:
Acceptance into the Law Enforcement Academy

30-504-421 Police Tactics 2 Credits
Through classroom lecture and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following WI Department of Justice 720 Academy Phase I curriculum framework topics: Fundamentals of Firearms I, DAAT I, Vehicle Contacts I, Integration Exercises, Phase I Written Exam, and Professional Communications II (Part 1).

Pre-requisite:
Acceptance into the Law Enforcement Academy

30-504-422 Advanced Police Tactics 5.00
Through classroom lecture and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following WI Department of Justice 720 Academy Phase II curriculum framework topics: Professional Communication II, Constitutional Law II, Crisis Management, Professional Communication (Part 2), Vehicle Contacts II, DAAT II, Phase II Fitness, Tactical Emergency Casualty Care, and Tactical Response.

Pre-requisite:
Acceptance into the Law Enforcement Academy

30-504-423 Police Emergency Response 4 Credits
Through classroom lecture and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following WI Department of Justice 720 Academy Phase II curriculum framework topics: Fundamentals of Firearms II, EVOC, Physical Evidence Collection I, Integration Exercises II, and Phase II Written Exam.

Pre-requisite:
Acceptance into the Law Enforcement Academy

30-504-424 Police Investigations 2 Credits
Through classroom lecture and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following WI Department of Justice 720 Academy Phase III curriculum framework topics: Crimes III, Report Writing III, Officer Wellness II - Suicide Prevention, Ethics II: Moral Reasoning & Professional Responsibility, Cultural Competence II, Physical Evidence Collection II, Interrogations, Victims, Sexual Assault, and Testifying In Court.

Pre-requisite:
Acceptance into the Law Enforcement Academy

30-504-425 Police Traffic Response 3 Credits
Through classroom lecture and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following WI Department of Justice 720 Academy Phase III curriculum framework topics: Traffic Law Enforcement II, Traffic Investigations & Incident Management, OMVWI/SFST, Hazardous Materials & WMD, and Phase III Fitness.

Pre-requisite:
Acceptance into the Law Enforcement Academy

30-504-426 Police Sensitive Crimes 3 Credits
Through classroom lecture and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following WI Department of Justice 720 Academy Phase III curriculum framework topics: Incident Command System & NIMS, Juvenile Law, Child Maltreatment, Domestic, Integration Exercises III, Phase III Written Exam, and Scenario Assessment.

Pre-requisite:
Acceptance into the Law Enforcement Academy

30-531-303 Advanced Emergency Medical Technician (AEMT) 4 Credits
Student demonstrates advanced knowledge and skills necessary to respond to an emergency as an advanced life support ambulance attendant. Students demonstrate and integrate critical decision making with advanced emergency care concepts and skills in patient treatment in the pre-hospital setting. Items needed for enrollment: * Current licensure by the State of Wisconsin as an EMT.

30-531-305 Emergency Medical Technician 1 2 Credits
This course provides the foundational knowledge for future Emergency Medical Technicians and Emergency Medical Responders. Topics include: basic human anatomy, performing a patient assessment, traumatic injury management, airway management, and Basic Life Support cardiac resuscitation. Upon successful completion, candidates will be eligible to participate in the National Registry of EMTs Emergency Medical Responder exams for Wisconsin EMR certification.

Prerequisite:
Emergency Medical Technician entry requirements

30-531-306 Emergency Medical Technician 2 3 Credits
This course provides the student with the skills to perform patient assessment, stabilize/immobilize injuries and provide basic treatment of medical emergencies at the Emergency Medical Technician Basic (EMT) level.

Prerequisite:
Emergency Medical Technician (30-531-3) entry requirements Emergency Medical Technician 1 (30-531-305) or equivalency.

30-543-300 Nursing Assistant 2 Credits
Students examine federal and state requirements to become certified nursing assistants. Students successfully complete the classroom and lab portion of the course before progressing on to an assigned clinical agency for hands-on application. Students demonstrate interpersonal communication skills, personal care skills, and basic nursing skills while providing care to nursing home clients under the supervision of an instructor. Students also provide restorative care, protect client rights, and demonstrate care of the client with dementia. Students demonstrate academic and clinical application competency to prepare for successful completion of the National Nurse Aide Assessment Program (NNAAP) written and skills exam, which is required for entry onto the Wisconsin Nurse Aide Registry. Inclusion on the state registry is necessary for employment as a CNA.

30-804-313 Occupational Math 1 Credit
Students taking Occupational Math compute with rational numbers. Students use ratio and proportion and formulas to solve problems. In each topic area, students solve application problems.

30-812-301 Driver Education Classroom Instruction 3 Credits
The course places emphasis on traffic safety education curriculum information selection, development and use, as well as available instructional resources and materials. Coursework assignments involve the completion of individual observation and teaching activities and the culminating development of an effective driver education classroom curriculum.

30-812-302 Driver Education In-Car Instruction 3 Credits
The course will examine the role, aims and objectives, as well as teaching-based approaches of laboratory-oriented programs in Driver and Traffic Safety Education. Direct observation and practice experience during the behind-the-wheel activities will be required for students with emphasis on incorporating various teaching techniques during this time.

30-812-303 Driver Education Safety 3 Credits
The safety phase of Driver Education will introduce the basic concepts and principles of safety and loss prevention. The application and utilization of these concepts and principles to safety programs within our society is a primary objective of this course. Emphasis will be placed on various teaching techniques as it relates to school and roadway safety, and development of various risk control/safety awareness within that society.

31-404-337 Auto Body Mechanics Chassis 2 Credits
Students evaluate, diagnose, and repair damage to automotive drivetrains, steering and suspension systems, and braking systems as it applies to collision damaged vehicles.

31-404-338 Auto Body Mechanics HVAC & Restraints 2 Credits
Students evaluate, diagnose, and repair damage to automotive cooling, air conditioning, fuel, intake, exhaust, and restraints systems as it applies to collision damaged vehicles.

31-404-347 Electrical Fundamentals 2 Credits
Students gain the ability to apply the fundamentals of electricity and electronics with automotive as its emphasis. Students apply the principles of Ohm's law, circuit requirements, current flow, voltage, electrical schematics and symbols. Students gain a working knowledge of scan tools and test meters. Students recognize the importance of Advanced Driver Assistance Systems and the other electrical safety devices built into the motor vehicle and diagnoses and repairs electrical problems.

31-405-356 Auto Body Welding 3 Credits
Students weld light gauge sheet metal using MIG welding. Students learn personal safety and safe work procedures during welding processes which include Oxyfuel, MIG, & Resistance Spot Welding, as well as Oxyfuel and Plasma Cutting. They perform Aluminum MIG welding and MIG brazing.

31-405-364 Buffing & Detailing 2 Credits
The student learns safe work procedures and uses vehicle cleaning equipment to detail vehicles. The student learns the proper methods to buff and polish automotive finishes.

31-405-365 Bolt-On Panels & Dent Repair 4 Credits
Students remove, replace and adjust hoods, fenders, bumpers, and doors. They repair minor dents on steel body panels.

31-405-366 Fundamentals of Painting 2 Credits
The student learns safe work procedures for personal safety and environmental compliance. Students perform surface preparation procedures and learn the proper use and care of refinishing equipment. Students mix refinish materials and apply it to practice panels.

31-405-367 Damage Analysis, Estimating, & Customer Service 3 Credits
The student analyzes damaged vehicles and estimates repair costs with a computer. The student uses electronic measuring systems to diagnose damage to vehicle structure and repairs damage using proper equipment and safety procedures. The student participates in customer service scenarios.

Pre-requisite:
Bolt-On Panels & Dent Repair (31-405-365)

31-405-368 Structural Repair 3 Credits
The student uses proper procedures and equipment operation to repair and replace damaged structural panels on unibody and full frame vehicles.

Pre-requisite:
Bolt-On Panels & Dent Repair (31-405-365)

31-405-369 Intermediate Painting 2 Credits
The student safely mixes and applies various refinish products to a vehicle. The student sprays primers, waterborne base colors, and clear coats on vehicles.

Pre-requisite:
Fundamentals of Painting (31-405-366)

31-405-370 Advanced Painting 3 Credits
The student inspects and analyzes paint defects and determines corrective action. The student learns to develop a refinish repair plan and perform the proper safety procedures. Matching existing vehicle finish with blending techniques is performed on vehicles.

Co-requisite:
Intermediate Painting (31-405-369)

31-408-308 Construction Safety and Health 1 Credit
This course introduces students to construction safety principles associated with OSHA, the Focus Four Hazards that include fall hazards, caught-in-between hazards, struck-by hazards and electrical hazards. Students will learn to properly utilize personal protective equipment, fall protection, scaffold and ladders, and other construction safety related equipment to help avoid health hazards and injury. Students will have the opportunity to earn the OSHA 10-hour certification credential.

31-413-303 Electric Power Distribution Fund 1A 4 Credits
The student is introduced to basic electrical theory using Ohm's Law to analyze series, parallel and combination circuits. Concepts of work, power, energy, and magnetism will be studied. Student learns basic line construction materials such as insulator design, pole information, and wire size and resistance, with hands on practice on communication signals for line workers. Students will be introduced to GPS and its applications to onsite work. Throughout the course there is an emphasis on safety for line workers.

31-413-304 Electric Power Distribution Fund 1B 4 Credits
The student is introduced to basic A.C. circuits and advances to A.C. circuits with induction and capacitance. The course includes A.C. parallel circuits with resistance, inductive reactance and capacitive reactance. The student learns guying and anchoring concepts. Throughout the course there is an emphasis on safety for line workers.

31-413-305 Electric Power Dist Fund 1C-App Lab 5.00
The student is introduced to power line construction techniques including staking/overhead line design, overhead structure specifications, overhead distribution line construction and stringing/sagging overhead line conductors. The course includes basic hydraulics and line truck operation. Ropes, knots, and splices associated with the line workers trade will be learned and used throughout the course. Electrical connectors will also be covered. Students will learn aerial climbing tools and techniques. The student uses electrical test equipment and hand and power tools associated with the line workers trade. Throughout the course there is an emphasis on safety for line workers.

31-413-306 Electric Power Dist Fund 2A 4 Credits
The student is introduced to the theory of three-phase electrical power systems, including wye and delta systems. Student studies single- and three-phase transformer; construction, principles of operation, connections as well as secondary power supply systems. Skills in electrical system grounding principles and over voltage equipment will be developed. Safety topics related to electrical line work will be highlighted.

Prerequisite:
Electric Power Distribution Fund 1A (31-413-303)

31-413-307 Electric Power Dist Fund 2B 4 Credits
The student is introduced to electrical power line apparatus such as; over current equipment, voltage regulators and kilowatt hour meters. Components and functions of an electrical substation, underground distribution systems, street lighting equipment, along with the sources of communication interference from electrical sources. Safety related topics are included.

Prerequisite:
Electric Power Distribution Fund 1B (31-413-304).

31-413-308 Electric Power Dist Fund 2C-AppLab 4 Credits
The student integrates lab concepts in advanced levels of topics such as; aerial climbing, rope knots and slices, electrical connectors, electrical test equipment, as well as hand tools. Application and installation of various electrical apparatus in a lab environment is completed by the students. Overhead transmission structures are constructed, protective grounding is introduced and live line work such as; rubber gloving and hot stick use is practiced (de-energized lines). Underground related equipment is introduced including cable terminating tools and cable locating equipment. Student installs UD cable and terminate cable. Student also operates a modern combination trencher-cable plow. Safety for the various lab activities is stressed.

Prerequisite:
Electric Power Dist Fund 1C-App Lab (31-413-305).

31-420-320 Intro to Print Reading 1 Credit
Introduction to reading and interpreting prints and industrial drawings. Interpretation of views, projection, lines, section, working and assembly drawings relative to manufacturing processes and order of operations. This course integrates math skills with print reading.

31-420-321 Machine Shop Safety Practices & Maintenance 1 Credit
The safety unit includes instruction in topics such as lockout-tagout, personal protective equipment, OSHA compliance, material safety data sheets, handling and storage of materials and emergency response procedures.

31-420-322 Intro to Manual Mill 1 Credit
This course will provide instruction and practice in the use of milling machines and various processes performed on them. Students will learn about mills, associated processes, milling machine tooling, and related safety/maintenance issues.

31-420-323 Intro to Manual Lathe 1 Credit
This course will provide instruction and practice in the use of lathe machines and various processes performed on them. Students will learn about lathe, associated processes, lathe machine tooling, and related safety/maintenance issues.

31-420-324 Manual Machine Speeds & Feeds 1 Credit
Students will determine cutting speeds for high speed steel tooling on manual mill and lathes. Students will calculate feed per tooth and inches per minute for various cutters. Students will calculate proper spindle speeds for twist drills.

31-420-325 Tooling & Materials of Manufacturing 1 Credit
Students will learn about of various types of tooling used in the industry. Students will learn about the materials they are machining and how the materials are processed.

31-420-326 Intro to Quality Practices & Measurement Equipment 1 Credit
Students will perform quality practices used by machine shops for various part checks. Students will learn how to fill out data sheets and use various parts specific measurement equipment.

31-420-327 Intro to Surface Grinding 1 Credit
Students complete basic grinding operations to include installation of grinding wheel, work holding techniques, speeds and feeds and problem solving. Use profilometer to measure roughness average and grind parts specific dimensions.

31-420-328 Intro to Mastercam Mill 2D 1 Credit
Introduction to computer aided machining of 2 dimension parts using CAM software. Students will use CAM software to create and machine pockets, slots, bosses, holes and engraved details in CNC milled parts.

31-420-329 Advanced Manual Mill 1 Credit
This course will be a continuation of Intro to Manual Mill. Students will practice in the use of milling machines and various processes performed on them. Students will learn about rotary tables, t-slot cutters and boring bars.
Co-requisite:
Intro to Manual Mill (31-420-322)

31-420-330 Advanced Manual Lathe Machine 1 Credit
This course is a continuation of Intro to Manual Lathe Machine. Students will practice the use of lathe machines and various processes performed on them. Students will learn about lathe, four jaw chucks, face plates, taper attachments and collet puller.
Co-requisite:
Intro to Manual Lathe (31-420-323)

31-420-331 Advanced Print Reading 1 Credit
Print reading is learning a new language in graphic or symbolic form for the purpose of manufacturing or assembling mechanical components. Units include: orthographic projection, sketching, dimensioning, machine process callout, tolerance, finish, title blocks, notes, hole types, threads, symbols and callouts.

Co-requisite:
Intro to Print Reading (31-420-320)

31-420-332 Advanced Measuring Equipment 1 Credit

Provides instruction in the care and use of measurement tools and inspection equipment necessary to maintain quality standards in the manufacturing environment. Semi-precision through high-precision measurement tools, gages, inspection sheets and processes, direct and comparative inspection methods will be covered.

31-420-333 Intro to Mastercam Lathe 1 Credit

Introduction to computer aided machining of 2 dimension parts using CAM software. Students will use CAM software to create lengths, diameters, chamfer, counterbore, external threads and parting off in CNC lathes.

31-420-334 Intro to Computer Numerical Control Prog Mill 1 Credit

Students apply skills in the programming and operation of a machining center using G-code. Explore basic metrology, tool selection and work hold devices. Rapid and Linear Interpolation, Circular Interpolation, Drilling, Bolt Circles, Subroutines and Subprograms, Cutter Compensation and Pocket Milling.

31-420-335 Intro to Computer Numerical Control Prog Lathe 1 Credit

An introduction to planning and writing programs for computer numerically controlled turning centers using G and M code. Students learn to write basic programs for CNC lathes, proof programs and run programs in CNC machine tools. Programming basics will include multiple tool programs, tool nose compensation and canned cycles.

31-420-336 Basic CNC Operation Mill 1 Credit

The setup of CNC Machining centers is covered in this course. Applications include selection of tools and workholding devices, setting tool offsets and work coordinate positions, calling programs, proofing programs, and minor edits and machine adjustments.

31-420-337 Basic CNC Operation Lathe 1 Credit

The setup of CNC turning centers is covered in this course. Applications include selection of tools and workholding devices, setting tool offsets and work coordinate positions, calling programs, proofing programs, and minor edits and machine adjustments.

31-420-340 Geometric Dimensioning & Tolerance 1 Credit

Recognition and interpretation of geometric dimensioning and tolerancing symbols and application as applied to prints for the manufacture of parts.

Pre-requisite:

Intro to Print Reading (31-420-320)

31-420-341 Fixture Basic Lathe & Mill 1 Credit

The fundamentals of workholding and fixturing for CNC turning and milling are covered in this course. Students will apply what they learn by determining workholding needs, recognizing problems with CNC machine operation, change and adjust tooling and fixtures and perform multiple part setups.

Pre-requisite:

Basic CNC Operation Mill (31-420-336)

31-420-342 CNC Machine Speeds & Feeds 1 Credit

Students will determine cutting speeds for carbide tooling on mill and lathes. Students will calculate feed per tooth and inches per minute for various cutters and materials. Students will calculate proper spindle speeds for milling and drilling operations.

31-420-343 Processes of Manufacturing 1 Credit

Students learn to apply manufacturing requirements to the design of mechanisms by studying manufacturing disciplines. These disciplines include metallurgy, steel identification, casting, forging, cold working metals, plastics, and other specialized processes. The students will receive hands on work with MIG welding. Tours of various area manufacturing facilities will give the students new insight into various manufacturing processes.

31-420-344 Advanced Mastercam Mill & Lathe 1 Credit

This will be a continuation of Mastercam Mill & Lathe 2D where students will draw within software multiple mill and lathe parts. Then post to CNC machines to finish parts.

Prerequisite:

Intro to Mastercam Mill 2D (31-420-328)

Co-requisite:

Intro to Mastercam Lathe (31-420-333)

31-420-345 Precision Machining Internship 2 Credits

Students apply technical theory and skills on the job. Students will setup and perform production part runs. Students will verify critical dimensions on parts and develop appropriate employment attitudes.

31-442-310 Equipment Safety 1 Credit

In this hands-on course students will set up machine guards, identify different personal protective equipment, demonstrate safety using a fork truck, and demonstrate welding safety as well as oxy-fuel safety.

31-442-310 Equipment Safety 1 Credit

In this hands-on course students will set up machine guards, identify different personal protective equipment, demonstrate safety using a fork truck, and demonstrate welding safety as well as oxy-fuel safety.

31-442-311 Oxyfuel Gas Cutting & Gouging 1 Credit

In this hands-on class students will perform manual and machine (track burner) oxyfuel gas cutting as well as manual and machine oxyfuel gas gouging.

31-442-312 Arc Cutting & Gouging 1 Credit

In this hands-on course students will complete air carbon cutting and gouging as well as examine cut surfaces and edges of prepared base metal parts.

31-442-313 Plasma Cutting & Gouging 1 Credit

In this hands-on course students will complete plasma arc cutting as well as plasma arc gouging and will examine gouge surfaces and edges of prepared base metal.

31-442-314 Oxyfuel Equipment 1 Credit

In this hands on course, students will learn how to make external repairs on oxy-fuel equipment components, inspect for safety, and set up oxyfuel equipment for welding.

31-442-315 Oxyfuel Brazing & Welding-Carbon Steel 1 Credit

In this hands-on course students will learn how to make surfacing welds in the flat position, make fillet welds, and make groove welds on plain carbon steel.

31-442-315 Oxyfuel Brazing & Welding-Carbon Steel 1 Credit

In this hands-on course students will learn how to make surfacing welds in the flat position, make fillet welds, and make groove welds on plain carbon steel.

31-442-316 Oxyfuel Brazing & Welding-Stainless Steel 1 Credit

In this hands-on course students will learn how to make fillet and groove welds in all positions on 3XX stainless steel using the Oxyfuel process in accordance with AWS specifications.

31-442-320 SMAW - Equipment 1 Credit

In this hands-on course the student will identify SMAW equipment components as well as inspect those components for safety. The student will also set up SMAW equipment for welding plain carbon steel and 3XX stainless steel.

31-442-323 GTAW - Equipment 1 Credit
In this hands-on course the student will identify GTAW equipment components as well as inspect those components for safety. The student will also set up GTAW equipment for welding plain carbon steel, aluminum and 3XX stainless steel.

31-442-324 GTAW - Carbon Steel 1 Credit
In this hands-on course the learner will learn how to make fillet and groove welds in all positions on plain carbon steel using the GTAW process as well as perform GTAW weldments that pass visual inspection.

31-442-325 GTAW - Aluminum 1 Credit
In this hands-on course students will learn to make groove and fillet welds in all positions on aluminum using the GTAW process in compliance with the AWS specifications.

31-442-326 GTAW - Stainless Steel 1 Credit
In this hands-on course students will learn how to make fillet and groove welds in all positions on 3XX stainless steel using the GTAW process in accordance with AWS specifications.

31-442-327 GMAW - Equipment 1 Credit
In this hands-on course the student will identify GMAW equipment components as well as inspect those components for safety. The student will also set up GMAW equipment for welding plain carbon steel, aluminum and 3XX stainless steel.

31-442-328 GMAW - Carbon Steel (S Process) 1 Credit
In this hands-on course student will learn to make fillet and groove welds in all positions on plain carbon steel using the GMAW-S process in accordance with AWS Specifications.

31-442-329 GMAW - Aluminum 1 Credit
In this hands-on course student will learn to make fillet and groove welds in all positions on Aluminum using the GMAW process in accordance with AWS Specifications.

31-442-330 GMAW - Stainless Steel 1 Credit
In this hands-on course students will learn how to make fillet and groove welds in all positions on 3XX stainless steel using the GMAW process in accordance with AWS specifications.

31-442-331 GMAW - Carbon Steel (Spray Transfer) 1 Credit
In this hands-on course student will learn to make fillet and groove welds in all positions on plain carbon steel using the GMAW- Spray Transfer process in accordance with AWS Specifications.

31-442-332 FCAW - Equipment 1 Credit
In this hands-on course the student will identify FCAW equipment components as well as inspect those components for safety. The student will also set up FCAW equipment for welding plain carbon steel.

31-442-333 FCAW - Carbon Steel (Gas Shielded) 1 Credit
In this hands-on course the learner will learn how to make fillet and groove welds in all positions on plain carbon steel using the FCAW (Gas Shielded) process as well as perform FCAW weldments that pass visual inspection.

31-442-335 Welding for Plumbers 1 Credit
Students perform oxy-fuel brazing in all positions on copper and stainless steel tubing using various filler metals. Students perform Shielded Metal Arc Welding in all positions on steel and stainless steel pipe.

31-442-336 SMAW 2 Credits
In this hands-on course the learner will learn how to fillet and groove welds in all positions on plain carbon steel and 3XX stainless steel using SMAW process as well as perform SMAW weldments that pass visual inspection and in accordance with AWS specifications.

31-457-317 Forming & Folding Metal 1 Credit
In this hands-on course students will learn to form and fold metal using a forming roll, power press break, and a box and pan brake. Students will also learn to bend pipe.

31-457-318 Fabricating 1 Credit
In this hands-on course students will use different equipment to fabricate, including sawing equipment, drill and tap equipment, and hydraulic iron worker.

31-457-334 Fabrication Planning & Drawing 1 Credit
In this hands-on course students will learn how to properly form blueprints as well as create a project through planning, drawing and fabricating phases.

31-475-312 Introduction to Building Trades 1 Credit
Introduces the learner to the fundamental building materials and methods of residential construction. Students will practice safe operation of hand tools and power tools. Various types of joining methods and general shop safety practices will be covered. Students will apply building trades skills by completing a small wood working project.

31-475-313 Site Layout, Foundations, and Formwork 2 Credits
Students will be introduced to building elevations, measuring and layout methods using a builder's level, laser level, and total station. The construction applications of concrete and concrete forms for footings, foundation walls, and flat work will be analyzed.

31-475-314 Floor and Wall Framing 3 Credits
Students will learn to recognize and apply the materials, methods, and procedures required to frame walls and flooring systems. The safe operation of hand tools and portable power tools will be executed as students measure and layout floor and wall framing.

31-475-315 Blueprint Reading 2 Credits
This course introduces students to blueprint reading and the basic components, including the various types, symbols, and abbreviations. Students will practice analyzing and reading various types of working drawings, detailed drawings, elevations, and floor plans used in residential construction.

31-475-316 Roof Systems 2 Credits
Students will evaluate and apply the principles of roof framing, truss layout, and dormer framing. Various types of roof shapes and pitches are examined. Types of underlayment and the proper installation are explored and practiced. Various connectors and fasteners are utilized. Multiple types of roofing materials and proper installation methods are introduced including wood, architectural metal, and asphalt.

31-475-317 Exterior Finishes 2 Credits
Students will explore and apply methods and materials used in residential structures including: soffit and fascia installation, various types of siding installation and various types of trim. Proper types of fasteners and methods of fastening will also be covered.

31-475-318 Residential Estimating 2 Credits
Students will apply quantity survey and quantity take-off methods of residential estimating through the study and interpretation of construction plans and specifications. Material pricing and projections will be conducted using residential estimating forms, spreadsheet planning tools, and estimating software.

Prerequisites:
Blueprint Reading (31-475-315)
Roof Systems (31-475-316)
Exterior Finishes (31-475-317)

31-475-319 Building Science and Sustainability 1 Credit

Students will explore innovative construction design techniques focused on energy efficient and sustainable conservation practices. Alternative energy systems will be analyzed and differentiated in applied learning lab activities.

Prerequisites:

Blueprint Reading (31-475-315),
Roof Systems (31-475-316)
Exterior Finishes (31-475-317)

31-475-320 Insulation, Drywall Installing, and Finishing 2 Credits

Students will explore and apply best practices in construction insulation methods. Fiberglass, loose-fill, dense pack, batt insulation, rigid polystyrene (EPS) (XPS) (ISO), and spray foam applications will be covered. Drywall installation and finishing will be discussed and practiced in the lab. Methods of patching, repairing, and applying a decorative finish will be covered.

Prerequisites:

Blueprint Reading (31-475-315),
Roof Systems (31-475-316)
Exterior Finishes (31-475-317)

31-475-321 Cabinet Construction and Installation 1 Credit

Students will be introduced to cabinet design and construction methods used in cabinet making and installation. Installation of specialty cabinetry hardware, drawer and case construction and installation will be covered.

Prerequisites:

Blueprint Reading (31-475-315)
Roof Systems (31-475-316)
Exterior Finishes (31-475-317)

31-475-322 Interior Finishes and Stair Construction 3 Credits

This course introduces students to the materials and techniques used to finish the interior of a residential home. Students will apply installation techniques in a base, casing, crown molding, and complete a stair balustrade and hand rail.

Prerequisites:

Blueprint Reading (31-475-315)
Roof Systems (31-475-316)
Exterior Finishes (31-475-317)

31-475-323 Windows, Doors, and Hardware Installation 2 Credits

Students will follow the proper installation techniques for interior and exterior doors and window installation. The various types and installation of door hardware will be analyzed and applied.

Prerequisites:

Blueprint Reading (31-475-315)
Roof Systems (31-475-316)
Exterior Finishes (31-475-317)

31-501-101 Medical Terminology 2 Credits

This course focuses on the component parts of medical terms: prefixes, suffixes and word roots. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

31-501-104 Contemporary Healthcare Practices 2 Credits

An introduction to contemporary healthcare practices for students interested in a career serving diverse healthcare communities. Learners explore the essential skills required for equitable and inclusive person-centered interactions. Learners examine various health communities, mindful practices, professionalism, problem solving, and patient confidentiality.

31-502-301 Basic Hair Design 5.00

Students apply haircutting, hair tapering, razor cutting, beard shaping and shaving techniques, using a variety of methods, products and tools with consideration for customer's needs and expectations. Students will also perform shampooing, conditioning treatments before practicing a variety of hairstyling skills such as thermal waving, blow outs, roller setting, thermal straightening, and pin curl placement to finish the desired design. Students will explore correct placement and care of wigs, hairpieces and extensions. Through analysis and consultation, students will identify scalp disorders so they can recommend hair and scalp treatments.

Pre-requisite:

Student must be accepted into the Cosmetology program.

31-502-302 Salon/Spa Science 2 Credits

Students learn the importance of a professional image, hygiene, grooming, and professional development and ethics necessary for a salon or spa employee. Students perform sanitation and disinfection according to the State of Wisconsin laws to keep the salon clean and safe. Students study anatomy, physiology related to the skin, and basics of chemistry and electricity in the salon clinic. First aid and safety are covered in this course to comply with standards of the industry.

Pre-requisite:

Student must be accepted into the Cosmetology or Nail Technician program.

31-502-303 Chemical Restructuring 2 Credits

Students perform chemical services using permanent waving and chemical relaxing techniques. Students understand how the hair is restructured chemically through the study of chemistry in this course. Students wrap and process hair to permanently curl hair into different curl and design textures. Students chemically straighten hair using professional tools and products. Students practice client consultations and all safety and sanitation procedures.

Pre-requisite:

Student must be accepted into the Cosmetology program.

31-502-304 Haircoloring and Techniques 3 Credits

Students practice client analysis and consultations related to haircoloring services. Students study the color wheel and the theory behind the Law of Color. Students practice communication skills to identify each client's desires and needs. Students mix and apply various types of hair colors, demonstrate foil techniques and corrective color procedures. Students explore different techniques in hair color services related to industry trends. Students practice all safety and sanitation procedures related to the state laws and rules.

Pre-requisite:

Student must be accepted into the Cosmetology program.

31-502-305 Nail Technology 3 Credits

Students practice client analysis and consultations related to nail services. Students safely prepare working area for nail services. They study nail disorders and diseases and review the anatomy and physiology as related to the hands and feet. Students practice communication skills to identify each client's desires and needs. Students develop skills in manicuring, pedicuring and nail enhancements. Students practice all safety and sanitation procedures related to the state laws and rules.

Pre-requisite:

Student must be accepted into the Cosmetology or Nail Technician program.

31-502-306 Basic Facials 2 Credits

Students explore the importance of proper skin care services. Students explain pertinent information during a client consultation and skin analysis. Students perform facials including massage, hair removal, makeup and band lash application.

Prerequisite:

Salon/Spa Science (31-502-302) with a C or better.

31-502-307 Salon/Spa Management 2 Credits

Students learn management, advertising and book keeping skills involved in operating a salon/spa as a business. Students learn how to establish positive customer communications and relationships. Students practice math skills while learning receptionist responsibilities. Students plan a salon/spa business using the requirements of Wisconsin guidelines. Students learn the State of Wisconsin Rules and Regulations guidelines. Students prepare for job opportunities.

Pre-requisites:

Salon/Spa Science (31-502-302)

Nail Technology (31-502-305). both with a C or better.

31-502-314 Salon Services I - Fundamentals 3 Credits

Students begin practicing the fundamentals of cosmetology services on customers in a salon environment. They apply knowledge and skills learned in their related theory and lab classes to hands-on work experience.

Prerequisites:

Basic Hair Design (31-502-301)

Salon/Spa Science (31-502-302)

Chemical Restructuring (31-502-303)

Hair Coloring and Techniques (31-502-304)

Nail Technology (31-502-305) with a C or better.

31-502-315 Salon Services II - Basic Concepts 4 Credits

Students perform a variety of salon services for customers in a salon setting. Students conduct basic concepts related to professional attitude, ethics, and the practice of salon skills performed in the salon atmosphere.

Prerequisite:

Salon Services I – Fundamentals (31-502-314) with a C or better.

31-502-316 Salon Services III - Skill Building 4 Credits

Students continue performing various salon skills with greater proficiency while building skills performed in salon services.

Prerequisite:

Salon Services II – Basic Concepts (31-502-315) with a C or better.

31-502-317 Salon Services IV - Intermediate Skills 4 Credits

Students develop intermediate skills in service areas of hair cutting, barbering techniques, chemical services, nail technology, and skin care services with increased attention to individual client needs.

Prerequisite:

Salon Services III – Skill Building (31-502-316) with a C or better.

31-502-318 Salon Services V - Proficiency Building 5.00

Students continue to develop speed and greater proficiency in all areas of advanced salon services, including chemical services, hair cutting, barbering techniques, color, nail technology, and skin care with increased attention to individual client needs. Students work together as a team and cooperation with other students is assessed along with professional attitude, ethics, and conduct.

Prerequisite:

Salon Services IV – Intermediate Skills (31-502-317) with a C or better.

31-502-319 Salon Services VI - Advanced Techniques 5.00

Students perform a variety of advanced techniques and required services. Students show competency in these services and can complete these tasks with additional speed and attention to detail. Students demonstrate salon management skills using computerized appointment booking and attention to closing out the cash register to balance the day's receipts. Students demonstrate competency in running a salon, including paying attention to cleanliness, sanitation, safety, inventory, retail control and organization.

Prerequisite:

Salon Services V – Proficiency Building (31-502-318) with a C or better.

31-502-322 Nail Services 3 Credits

Students practice nail services on customers in a salon environment. They apply knowledge and skills learned in their related theory lab classes to hands-on work experience. Students perform all manicure and pedicure services as well as all nail extension services in a salon atmosphere.

Pre-requisites:

Salon/Spa Science (31-502-302)

Nail Technology (31-502-305) both with a C or better.

Co-requisite:

Salon/Spa Management (31-502-307)

31-508-302 Dental Chairside 5.00

Prepares dental assistant student to chart oral cavity structures, dental pathology, and restorations and to assist a dentist with basic dental procedures including examinations, pain control amalgam restoration, and cosmetic restoration. Students will also develop the ability to educate patients about preventive dentistry, brushing and flossing techniques, and dental procedures, using lay terminology. Throughout the course, students will apply decoding strategies to the correct use and interpretation of dental terminology.

31-508-304 Dental and General Anatomy 2 Credits

Prepares dental assistant students to apply fundamentals of general and dental anatomy to informed decision-making and to professional communication with colleagues and patients.

31-508-306 Dental Assistant Clinical 3 Credits

Students apply skills developed in Dental and General Anatomy, Dental Health Safety, Dental Chairside, Dental Materials, Dental Radiography, and Professionalism in a clinical setting with patients. Emphasizes integration of core abilities and basic occupational skills.

Pre-requisite: Must earn at least a grade of C in all classroom/laboratory learning settings to be eligible to work under the direct supervision of a dentist in a four-week externship.

31-508-307 Dental Assistant Professionalism 1 Credit

Prepares dental assistant students for professional success in a dental practice or another dental health care environment. Students develop professional appearance and image. More importantly, they learn to work within ethical guidelines and legal frameworks. In preparation for entering the work force, dental assistants customize or develop their portfolios and lay out an ongoing professional development plan.

31-509-301 Medical Asst Admin Procedures 2 Credits

Introduces medical assistant students to office management and business administration in the medical office. Students learn to schedule appointments, perform filing, record keeping, telephone and reception duties, communicate effectively with patients and other medical office staff, and keep an inventory of supplies. Students apply introductory medical coding skills and managed care terminology.

31-509-302 Human Body in Health & Disease 3 Credits
Focuses on diseases that are frequently first diagnosed and treated in the medical office setting. Students learn to recognize the causes, signs, and symptoms of diseases of the major body systems as well as the diagnostic procedures, usual treatment, prognosis and prevention of common diseases.

31-509-303 Medical Asst Lab Procedures I 2 Credits
Introduces medical assistant students to laboratory procedures commonly performed by medical assistants in a medical office setting. Students perform routine laboratory procedures commonly performed in the ambulatory care setting under the supervision of a physician. Students follow laboratory safety requirements and federal regulations while performing specimen collection and processing, microbiology, and urinalysis testing.

31-509-304 Medical Asst Clin Procedures I 4 Credits
Introduces medical assistant students to the clinical procedures performed in the medical office setting. Students perform basic examining room skills including screening, vital signs, patient history, minor surgery and patient preparation for routine and specialty exams in the ambulatory care setting.

31-509-305 Medical Asst Lab Procedures 2 2 Credits
Introduces medical assistant students to laboratory procedures commonly performed by medical assistants in a medical office setting. Students perform routine laboratory procedures commonly performed in the ambulatory care setting under the supervision of a physician. Students follow laboratory safety requirements and federal regulations while performing specimen collection and processing, microbiology and urinalysis testing.

Prerequisite:
Medical Asst Lab Procedures I (31-509-303)

31-509-306 Medical Asst Clin Procedures 2 3 Credits
Prepares medical assistant students to perform patient care skills in the medical office setting. Students perform clinical procedures including administering medications, assisting with minor surgery, performing an electrocardiogram, assisting with respiratory testing, educating patients/community, and maintaining clinical equipment in an ambulatory care setting.

Prerequisite:
Medical Asst Lab Procedures I (31-509-303)
Medical Asst Clin Procedures I (31-509-304)

31-509-307 Med Office Insurance & Finance 2 Credits
Introduces medical assistant students to health insurance and finance in the medical office. Students perform bookkeeping procedures, apply managed care guidelines, and complete insurance claim forms. Students use medical coding and managed care terminology to perform insurance-related duties.

Prerequisite:
Medical Terminology (31-501-101)
Contemporary Healthcare Practices (31-501-104)

31-509-308 Pharm for Allied Health 2 Credits
Introduces students to classifying medications into correct drug categories and applying basic pharmacology principles. Students apply basic pharmacodynamics to identifying common medications, medication preparation, and administration of medications used by the major body systems.

31-509-309 Medical Law, Ethics & Profess 2 Credits
Prepares students to display professionalism and perform within ethical and legal boundaries in the health care setting. Students maintain confidentiality, examine legal aspects of the medical record, perform risk management procedures, and examine legal and bioethical issues.

31-509-310 Medical Assistant Practicum 3 Credits
Requires medical assistant students to integrate and apply knowledge and skills from all previous medical assistant courses in actual patient care settings. Learners perform medical assistant administrative, clinical, and laboratory duties under the supervision of trained mentors to effectively transition to the role of a medical assistant.

Corequisite: Medical Assistant Clinical Procedures 2 (31-509-306)

31-513-181 Quality Lab Microbiology 1 2 Credits
This course provides an overview of microbiological theory, testing, and control. This course will review lab safety, beneficial and pathogenic microorganisms and their detection and control within the industry. Sample collection, handling and preparation, in addition to tests performed to detect microorganisms in raw and manufactured dairy products will be discussed.

Corequisite:
Basic Lab Skills (10-513-110)
QA Lab Math (10-513-113)

31-513-182 Quality Lab Skills 1 1 Credit
The learner will be introduced to dairy food chemistry and applicable laboratory skills. Topics covered will include basic chemistry principles used in dairy food testing and quality analysis. Students will be introduced to testing performed in a dairy food manufacturing lab, standard laboratory methods and proper techniques. Emphasis will be placed on laboratory safety, laboratory equipment utilization, and quality techniques. Two semesters of high school Chemistry could replace the Fundamentals of Chemistry Co-requisite.

Corequisites:
Basic Lab Skills (10-513-110)
QA Lab Math (10-513-113)
Fundamentals of Chemistry (10-806-109)

31-513-185 Quality Lab Skills 2 1 Credit
The learner will apply testing techniques used in the dairy food manufacturing and quality industry to ensure product quality and safety. Concepts in data analysis as it relates to documentation of results, quality control testing, calibration, and troubleshooting will be reviewed. Emphasis will be placed on critical thinking, quality of work, and laboratory technique.

Prerequisites:
Quality Lab Skills 1 (31-513-182)

31-513-186 Quality Lab Microbiology 2 2 Credits
This course will review characteristics of microorganisms pertinent to the food manufacturing and quality testing industry. The learner will apply microbiological testing techniques used in the dairy food manufacturing and quality industry to ensure product quality and safety. Techniques in sampling methods and analysis of plate counts will be explored.

Prerequisites:
Quality Lab Microbiology 1 (31-513-181)

31-801-310 Workplace Communication 2 Credits
Students apply oral, written, listening, and non-verbal skills to workplace situations. Students discover how to use communication as the key to solving workplace problems, resolving conflicts, working as members of a team, and effectively giving and receiving criticism. Students develop an understanding of diversity in the workplace, harassment issues, and the impact of substance abuse on the job.

31-804-305 Applied Mathematics 2 Credits
Students compute with rational numbers. They make and convert various measurements. Students use formulas to solve problems. They compute dimensions of geometric shapes. Students use statistical tools to represent and analyze data. They analyze various financial situations. Students use basic right triangle trigonometry to solve problems. In each topic area, students solve application problems.

31-804-314 Occupational Math - Business 1 Credit
Students taking Occupational Math - Business organize data and represent data in graphical form. Students use graphs and statistical tools to represent and analyze data. They analyze various financial situations. Students also perform basic algebraic operations. They solve linear equations and rearrange algebraic formulas. In each topic area, students solve application problems.

31-804-315 Occupational Math - Technical 1 Credit
Students taking Occupational Math - Technical make and convert various measurements. They compute dimensions of geometric shapes. Students use basic right triangle trigonometry to solve problems. They also perform basic algebraic operations. Students solve linear equations and rearrange algebraic formulas. In each topic area, students solve application problems.

32-006-301 On-Farm Employment Relations 2 Credits
Introduces topics that relate to employment on a farm. Topics include personality, relationships, decision-making and social relations as they apply to everyday living and working in both family and non-family businesses. Personnel management techniques include: development of goals, determining personnel needs, finding and recruiting the right people, training, performance appraisals, promotions and terminations. Students will also learn about creating handbooks, writing job descriptions, and proper paperwork to have on file for employees.

32-006-302 On-Farm Nutrient Management Planning 2 Credits
Students will define reasons for developing a nutrient management plan for farms and the necessary components of a nutrient management plan according to the NRCS WI NM 590 standard. Topics discussed will be soil testing, conservation plans, manure management, and management of nutrient credits and applied nutrients (nitrogen, phosphorus, potassium) and pH. Specialized software will be used to create a nutrient management plan.

32-006-303 On-Farm Commodity Marketing 3 Credits
Students will learn the operation and use of agricultural commodity markets as it applies to enterprise risk management. Topics include cash markets; futures markets and futures option markets; basis; hedging and forward pricing; price discovery; fundamental analysis; technical analysis and risk management strategies. Students will participate in simulated commodity activities using real-time pricing to practice the concepts taught during the course.

32-070-301 Farm Machinery (Harvesting) 5.00
Students operate, recondition, adjust, and maintain many of the different types of harvesting equipment used on modern farms. Students diagnose electro-hydraulic systems used on combines and forage harvesters. Students learn the different types of combine construction and how this affects productivity. Students check for field loss and adjust combines to provide maximum efficiency.

32-070-303 Chassis and Drive Systems 5.00
Students diagnose and repair live power train problems which include clutches, transmissions, differentials, and PTOs. Students build skills necessary to diagnose and repair power trains on approved projects. Students use time management techniques during lab instruction while performing diagnostic tests and repairs. Students also use the latest computer resource information to gather parts and service information.

Prerequisite:
Basic Hydraulics (32-070-341)

32-070-305 Intro to Ag Electrical Systems 3 Credits
Students apply the fundamentals of electricity and electronics as it relates to the tractor electrical system. Students gain an understanding of the basic electrical system, reading schematics used to diagnosis these systems and how to apply test procedures for the circuits being studied. Students will learn the various test equipment and meters. They will apply the proper use of the test equipment while learning the basic electrical systems and repair procedures.

32-070-309 Farm Machinery Maintenance 5.00
Students learn to perform preventative maintenance procedures to a variety of agricultural equipment used in production agriculture. During this process the student gains an understanding of belt and chain drives, repair and adjustments, various types of bearings and bearing maintenance, PTO assemblies and associated repair procedures. Basic service maintenance of tractors is covered.

32-070-311 Diesel Engines I 5.00
Students learn concepts of the diesel engine operation and diagnostic processes used to locate problems within the engine. Students work with the maintenance and repair of the cooling system, lubrication system, fuel system and intake/exhaust systems. Students will use nozzle testing and repair equipment to make repairs to injection nozzles in the lab. Students will understand proper injection pump failure diagnosis and on tractor adjustments are emphasized as well as an insight into the specialized diesel component repair field that they may find employment in.

32-070-312 Diesel Engines II 5.00
Students learn how the internal components of the diesel engine work together in theory and in the lab as they apply repair techniques to a diesel engine overhaul project. Students learn how to properly measure the components and make informed decisions on the repair processes warranted as compared to the equipment specifications. This process includes developing a repair estimate to be shared with the customer.

32-070-314 Ag Shop Safety & Practices 1 Credit
Students learn skills required to become productive and efficient in the Agricultural service center. The skill set will include a working understanding of hand tools, power tools, lifting equipment, general shop equipment, fastener applications and the proper torqueing procedures for the various fasteners and gasket/sealant application. The student's skills are improved through practice and evaluation in a safety conscious manner. Students will gain a further understanding of employment opportunities, customer and employer expectations as well as the policies and procedures related to the operation of an Agricultural dealership.

32-070-319 Forage Equipment 3 Credits
Students learn the principles of the field operation and reconditioning of hay harvesting equipment. Students learn the different designs of hay cutting equipment and the maintenance procedures associated with the different designs found today. They move through the course to the hay harvesting equipment including small square balers, large square balers, round balers and forage harvesters. Students will learn the repair and field adjustment to the knotters used on small and large square balers, the wrapping options found on round balers and forage harvesters and their headers.

32-070-320 Grain Harvesting Equipment 3 Credits
Students learn proper operating procedures, adjust, and maintain many of the different types of harvesting equipment used on modern farms. Students learn the different types of combine construction and how this affects productivity. Students check for field loss and adjust combines to provide maximum efficiency.

32-070-321 Tillage & Planting Equipment 3 Credits
This course will primarily focus on tillage, planting and seeding equipment adjustments along with diagnostic procedures for making the equipment as efficient in the field as possible. The learner will also be able to define what the difference is between the primary and secondary tillage equipment.

32-070-322 Operations of Field Equipment 3 Credits
Students learn the operating principles of production equipment used on crop, livestock and dairy farms in southwest Wisconsin. Emphasis is placed on understanding the principle of machine adjustments to achieve optimum efficiency of the machine with the overall goal of reducing downtime during that critical planting and harvesting season. Students will develop a pre-season maintenance schedule based off of equipment used on their farm.

32-070-324 On-Farm Machinery Maintenance 1 Credit
Students will develop skills necessary to prepare farm equipment for the upcoming season applying information from the equipment's owner's manual to ensure the proper maintenance procedures are used to adjust the machine to achieve the best productivity it was designed for. During this process students will gain knowledge of common lubricants, service requirements, filters, belts, chains and implement drive systems.

32-070-341 Basic Hydraulics 4 Credits
Students disassemble, inspect, and repair hydraulic cylinders, pumps, and valves. Students apply hydraulic theory and principles by drawing hydraulic systems using ISO symbols. Students operate open and closed center hydraulic simulators to relate to the differences in pressure and flow.

32-070-343 Applied Hydraulics 4 Credits
Students learn the working fundamentals of hydraulic systems found on today's agricultural equipment including tractors, combines, skid steers loaders and related equipment through class discussion and lab demonstrations. Students will use hydraulic pressure gauges, flowmeters, diagnostic flow charts and manufacturer technical manuals as they apply theory to lab projects to enforce theory discussion and develop hands-on skills. Students also use the latest computer resource information available to gather parts and service information as it pertains to their lab project.

Pre-requisite:
Basic Hydraulics (32-070-341)

32-070-344 Air Conditioning 2 Credits
Students diagnose air conditioning system problems and make necessary repairs. Students will apply the laws and requirements set forth by state and federal agencies and are given the opportunity to take the state mobile air conditioning certification test to repair air conditioning systems upon satisfactory completion of this program.

32-070-345 Advanced Electrical Systems 4 Credits
Students build on fundamental electrical skills learned in the Starting and Charging Systems course. Students work with simulators and prior approved projects to develop diagnostic skills and repair techniques while learning and making repairs to lighting, control, and monitoring circuits. Students use onboard diagnostics systems and scan tools as an integral part of this course as well as factory technical manuals, online resources, and computer programs to access service and parts information to complete lab projects.

32-070-346 Consumer Equipment Maintenance & Repair 3 Credits
Students learn the repair concepts of home owner consumer products including Lawn & Garden tractors, riding lawn mowers, snow blowers, string trimmers, and chainsaws. Students learn basic design concepts and the repair and maintenance of the equipment found in everyday residences for home upkeep.

Prerequisites:
Ag Shop Safety and Practice (32-070-314) OR
Farm Shop Safety and Maintenance (10-070-103) OR
Ag Safety, Electrical, & Maintenance (10-070-104)

32-070-347 Farm Equipment I 3 Credits
Students learn the principles of field operation and reconditioning of tillage and planting equipment. Students learn methods of testing, calibrating, adjusting and maintaining the different types of seeding equipment. Emphasis is placed on getting the planting unit field-ready, and how to instruct the customer on proper field operation of the seeding equipment.

Prerequisites:
Ag Shop Safety and Practice (32-070-314)

32-070-348 Farm Equipment II 3 Credits
Students learn the principles of the field operation and reconditioning of hay harvesting equipment. Students learn the different designs of hay cutting equipment and the maintenance procedures associated with the different designs found today. They move through the course to the hay harvesting equipment including small square balers, large square balers, round balers. Students will learn the repair and field adjustment to the knotters used on small and large balers and the wrapping options found on round balers.

32-070-350 Ag Power Occup Internship 2 Credits
Students apply technical theory and skills on the job. Students diagnose and repair agricultural tractors and equipment. Students practice good communication and customer relation skills. Students develop appropriate employment attitudes.

Prerequisite:
Farm Equipment II (32-070-348)

32-080-302 Farm Operations & Management Internship 3 Credits
The student will have the opportunity to apply course work to a practical, on-the-job situation. Goals and task lists are followed.

Pre-requisites:
Operations of Field Equipment (32-070-322) OR
Pest ID & Management Crop Scouting (10-006-126) OR
Introduction to Farm Animal Health (32-080-306)

32-080-305 Introduction to Farm Animal Nutrition 3 Credits
This course will cover the basics of animal nutrition. Students will learn the digestive systems of monogastric and ruminant animals; nutritional needs of various farm animals; identify feedstuffs; understand animal feeding laws and regulations; how to read a feed test report; vitamin and mineral requirements of animals; and how to take a feed sample. Ration balancing will be introduced.

32-080-306 Introduction to Farm Animal Health 3 Credits
Students will develop an understanding of farm animal anatomy, behavior, and their health. Focus will be on immune system function and common diseases for various species (causes, treatments, and prevention). Students will develop an understanding of the ethical use of antibiotics, vaccines, and hormones.

32-080-307 Introduction to Farm Business Management 2 Credits
This course will cover the financial aspects of managing a farm. Topics of study will include: risk management, business structures, tax preparation, budgeting, balance sheets, cost of production, calculating cash flows, understanding the loan process, and depreciation. Students will use Excel and other computer applications to develop an understanding of topics.

32-080-308 Advanced Farm Business Management 3 Credits
The student will be able to evaluate the major strengths and weaknesses of a farm business using income statements, bench marking, and the farm financial ratios. Understanding how to manage the farm for tax purposes along with succession planning will also be covered. Students will also explore various farming enterprises and techniques to manage profit margins. Excel and other computer applications will be used to evaluate a farm business.

32-404-310 Auto Electrical I 3 Credits
Students focus on developing the skills needed to diagnose, service, and repair electrical and electronic systems. Students learn the fundamental concepts of electrical systems and understand wiring schematics. Learners utilize basic and digital test equipment, and apply Ohm's Law to electrical circuit diagnosis.

32-404-311 Auto Electrical II 3 Credits
Students focus on developing the skills needed to diagnose, service, and repair electrical and electronic systems, including batteries, starting, charging, lighting, and computer control systems. Students utilize advanced techniques to diagnose and repair circuit faults.

Prerequisite:
Auto Electrical I (32-404-310)
Automotive Service Fundamentals (32-404-334)

32-404-312 Auto Electrical III 3 Credits
Students focus on developing the skills needed to diagnose and repair automobile electrical accessories, including cruise control, windshield wipers, electric windows, electric door locks, instrumentation and power antennas. Students utilize test lights, digital test equipment and wiring schematics to employ a logical diagnostic procedure for determining electrical system problems.

Prerequisite:
Auto Electrical II (32-404-311)

32-404-314 Automotive Maintenance 3 Credits
Students perform routine maintenance of the automobile including new and used car preparation, fluid checks and service, interior and exterior considerations, replacing filters and small parts, repairing tires, replacing belts, replacing wiper blades, and other repairs to maintain acceptable automobile performance.

32-404-315 Engine Repair 5.00
Students apply information and skills in repairing automotive engines, including in-car repairs, removal and replacement of parts, and cylinder head rebuilding. Complete engine disassembly is discussed and performed.

Prerequisite:
Automotive Service Fundamentals (32-404-334)

32-404-321 Automatic Transmissions 5.00
Students diagnose, service, and repair automatic transmissions. Students practice safe and practical shop procedures through automatic transmission disassembly, cleaning, inspection, and reassembly.

Prerequisites:
Automotive Computer Control Systems (32-404-324)

32-404-322 Suspension & Steering 5.00
Students learn the fundamental concepts of suspension geometry and will analyze, diagnose, and repair automotive suspension and steering systems. Learners diagnose driving and handling concerns caused by steering and suspension system problems and misalignment concerns. Students operate computerized alignment equipment to perform four-wheel alignments on automobiles and operate wheel balancing equipment.

Prerequisite:
Automotive Service Fundamentals (32-404-334)

32-404-323 Emission Control Systems 2 Credits
Students diagnose and service emission control systems and perform exhaust gas analysis on automobiles and light trucks.

Co-requisite:
Auto Engine Performance (32-404-326)

32-404-324 Automotive Computer Control Systems 4 Credits
Students apply related theory and diagnostic procedures, to properly service and repair computerized control systems found on the modern day automobile, utilizing various types of diagnostic test equipment.
Co-requisite: Emission Control Systems (32-404-323)

32-404-325 Manual Drivetrains & Axles 5.00
Students perform service, diagnostic and repair procedures on manual transmission/transaxles, drive axles, differentials and transfer cases.

Prerequisite:
Automotive Service Fundamentals (32-404-334)

32-404-326 Auto Engine Performance 4 Credits
Students perform ignition and fuel system maintenance and diagnostic procedures using a variety of diagnostic tools and test equipment. Students apply engine operating principles to perform diagnostic procedures on systems related to engine performance and emission control.

Corequisite:
Auto Electrical III (32-404-312)

32-404-332 Heating and Air Conditioning 3 Credits
Students service, repair, and maintain automotive air conditioning systems using knowledge of how the system operates. Students diagnose problems using the appropriate equipment. Students test systems for leaks, recycle and recharge refrigerant, and remove and replace system components.

Prerequisites:
Auto Electrical III (32-404-312)

32-404-334 Automotive Service Fundamentals 3 Credits
Students practice basic skills encountered as a technician servicing automobiles and light trucks including metal work; handtool, powertool, and fastener usage; measuring techniques, hoist operation, gasket/sealer application; and oxyacetylene and mig welding techniques. Students' skills are improved through practice in a safety conscious manner. Students examine employment opportunities, employer and customer expectations, and policies and procedures related to the operation of an auto service shop.

32-404-335 Automotive Brakes 3 Credits
Students service and repair brake system problems using knowledge of brake system operation. Students use proper service tools and equipment to perform safe and quality brake system repair including disc brakes, drum brakes, parking brakes, and the brake hydraulic system. Students diagnose antilock brake system problems and perform necessary repairs.

32-404-336 Advanced Braking Systems 1 Credit
Students diagnose, service, and repair electrical and electronic systems relating to anti-lock brakes and electronic stability control systems. Students will learn the theory of operation, perform diagnostic procedures and practice problem-solving methods.

32-404-339 Applied Automotive Maintenance 1 Credit
Students apply automotive maintenance skills, provide lab support, and mentor fellow students taking the Automotive Maintenance course. Expanding on the fundamental concepts of automotive maintenance, students develop advanced knowledge, skills, and abilities to prepare for the ASE Automotive Maintenance G1 certification exam. Particular emphasis is placed on learning outcomes associated with engine repair, automatic and manual transmissions, brakes, steering and suspension, electrical diagnosis, and HVAC systems.

Pre-requisite:
Automotive Maintenance (32-404-314)

32-404-350 Auto Tech Occupational Internship 2 Credits
Students apply technical theory & skills, by maintaining, diagnosing and repairing automobiles and light trucks. Students practice the necessary personal and professional skills essential to be successful as an Automotive Technician

32-442-301 Related Welding 2 Credits
The student creates weldments in flat, vertical, horizontal, and overhead positions. These weldments will utilize SMAW, MIG, TIG, brazing and oxyfuel. All operations will adhere to AWS Code.

32-442-302 Related Welding 1 Credit
The student creates weldments in flat, vertical, horizontal, and overhead positions. These weldments will utilize SMAW, MIG, TIG, brazing and oxyfuel. All operations will adhere to AWS Code.

32-442-308 Blueprint Reading-Welding 1 Credit
Students learn the basic concepts and fundamentals of blueprint reading. Students apply the use of basic mechanical drafting skills to basic shop sketching. Students develop skills in recognizing basic lines and views in reading a welding print.

32-442-309 Blueprint Reading-Welding 2 1 Credit
Students interpret the use of a wide variety of symbols and abbreviations used in welding and how they are applied to assembly and detailed prints. Students use their knowledge of welding symbols to assemble projects.

32-806-303 Science of Mechanics 2 Credits
Students compute work, power, acceleration, heat, pressure, and other physical quantities. They explore simple machines and their applications. Students apply those physical quantities to automotive and agricultural power situations.

Prerequisites:
Applied Mathematics (31-804-305) OR
Math-Occupational (30-804-313) AND
Occupational Math-Technical (31-804-315) with a C or higher

42-812-401 Driver Education Theory - Online 0.75 Credit
The mission of driver education in Wisconsin high schools is to provide students with the skills to drive safely. Driver and safety education is based on the belief that this is a critical lifelong skill affecting the conservation and quality of human health and life. In order to accomplish its mission, driver and safety education programs focus on providing learning opportunities for the development of the skills, knowledge, and thought processes necessary to become a safe and efficient driver, and a responsible user the Highway Transportation System (HTS). Southwest Tech's Driver Education Program will prepare students with at least minimal capabilities for entry into the highway traffic system as vehicle operators, equip students with the knowledge and thought processes to enable them to make wise decisions as drivers and help students acquire the insight and motivation needed to become responsible users of the highway transportation system. Southwest Tech offers both traditional and online driver education to students within our district and throughout the state, as well as behind-the-wheel instruction for our district high schools. THIS COURSE IS FOR WISCONSIN RESIDENTS ONLY.

42-812-402 Driver Education-Behind the Wheel-Barneveld 0.30 Credit
Students put driver education theory into practice with behind-the-wheel instruction and observation of fellow drivers in a driver training vehicle. Students perform driving tasks and demonstrate the responsibilities that accompany them. Students obey traffic laws and regulations and develop safe and efficient driving patterns. Students experience the impact of natural forces and conditions on the driving environment, and they learn to identify hazardous conditions and react appropriately to avoid or minimize problems. Students practice safe, courteous, and defensive driving techniques.

42-812-408 Point Reduction 0.30 Credit
Traffic Safety-Point Reduction is a 12-hour course. The primary focus of the course is to encourage students to examine their driving behavior and attitudes, and to determine personal change required to improve their ability to operate a vehicle safely. You can take this course to reduce the demerit point total on your driving record by three points. Enrollment can be on a voluntary basis, at the request of the courts, or on recommendation by the Division of Motor Vehicles.

42-812-409 Driving for Adults (3-6 Hours) 0.10
Individualized instruction on the proper and safest operation of motor vehicle on the roadway.

42-816-404 Motorcycle Driver Education 0.40
Cycling requires special knowledge and skills that beginning riders likely do not have. Accident rates are high, and the cyclist must be constantly on the alert to avoid dangerous situations. Riders must be especially careful of changes in road and weather conditions. Statistics show that 60 percent of all accidents happen to those with less than one year of riding experience.

42-818-401 Group Dynamics 0.55
The Group Dynamics / Traffic Safety School Program is one highway safety initiative within Wisconsin which aims to reduce the number and frequency of alcohol related crashes. Specifically, the course is designed to assist those involved in alcohol/traffic related offenses to make permanent changes in their drinking and driving behavior and attitudes. There is a minimum of 21 classroom hours contained in this alcohol educational program. A three point credit to your current driving record can be requested upon completion of this course. For all convicted of drunk driving if ordered through their treatment plan.

42-818-402 Multiple Offender Program 0.85
The Multiple Offender Program is a specialized education course for individuals who have experienced two or more operating while intoxicated (OWI) charges. Participants are encouraged to examine their drinking and driving behavior and attitudes, and to formulate an alternative lifestyle which will improve their ability to operate a vehicle safely. The Multiple Offender Program is not designed as a treatment program. It is intended to benefit the irresponsible drinker who is experiencing continual problems with drinking and driving. Individuals assessed as chemically dependent should not be referred to the program.

47-090-402 Goat-Reproduction and Breeding Program 0.20
Students will learn the goat reproductive anatomy and how heat cycles are timed to utilize all genetics to the fullest potential through natural and artificial breeding. Students will discuss methods of detecting heats and artificial insemination. Practical hands-on applications in the areas of: breeding systems and breeding records will allow students opportunities to practice and solidify their skills.

47-090-405 Goat-Business Promotion and Marketing 0.20

Students will gain an understanding of the role a farm owner/operator plays in public relations today. Students will be exposed to methods of public relations like social media and direct contact with the public. Students will identify proper animal handling techniques. Finally, students will be required to complete a promotional project before completion of this course. Practical hands-on applications in the areas of: down animal care, body conditioning scoring, and animal flow allow students opportunities to practice and solidify their skills.

47-090-408 Goat-Kid Management 0.25

Students will learn basic kid care procedures to promote healthy replacement dairy goat does. Students will identify and discuss kid management practices focusing around proper nutrition, vaccination protocols, housing needs, and labor needs. Students will build a set of Standard Operating Procedures for kid care on their operation. Practical hands-on applications in the areas of: initial kid care, fresh and pre-fresh doe care, kid health, and kid nutrition will help students practice and solidify their skills.

47-090-413 Nutrient Management Planning 0.60

Students will learn and understand the various aspects of how to develop an effective nutrient management plan including crop rotations, crop yield goals, soil, plant, manure and water test results. The development of farm nutrient management plans is becoming a reality and is under a county ordinance or a Wisconsin pollution discharge elimination system permit (WPDES) from Wisconsin's Department of Natural Resources (DNR). A nutrient management plan is also required when a landowner voluntarily accepts government cost-share dollars for the installation of manure storage of barnyard runoff control structures.

47-090-414 Goat-Herd Health 0.35 Credit

Students will be introduced to dairy goat herd health. Students will gain a basic understanding of practices in the areas of kidding/parturition, hoof care, udder health, common diseases, and parasites. Students will discuss management protocols needed on farm to promote healthy animals. Students will write basic protocols for a commercial dairy goat operation. Practical hands-on applications in the areas of milking procedures, medication administration, kidding procedures, and hoof care allow students opportunities to practice and solidify their skills.

47-090-415 Goat-Meat Production 0.25 Credit

Students will be introduced to meat goat production. Students will gain a basic understanding of management practices in the areas of: breed selection, nutrition, parasites, showing, finances and recordkeeping applicable to the meat goat industry. Students will discuss management protocols needed on farm to promote healthy animals. Students will write basic protocols for a meat goat operation.

47-090-416 Goat Artificial Insemination 0.15 Credit

Students will review the male and female goat reproductive tract and hormones that effect the reproductive tract and the estrus cycle of the female. Students will identify hormones used for inducing heats. Students will practice artificially inseminating a goat on farm as part of this course.

47-090-421 Nutrient Management Planning Update 0.25 Credit

This update course is designed for producers that have successfully completed the full curriculum course (Nutrient Management Planning 47090-413) and are certified to write their own nutrient management plan. The update course will provide the producer access to a computer lab and instructors to assist with questions in updating their nutrient management plan.

47-090-428 Livestock Management-Animal Comfort & Housing 0.30 Credit

Students will be provided the most current information in animal comfort and housing. This will include discussing optimal structures and environments for animal growth and comfort; heating, cooling, ventilating principles and equipment; animal housing design; common bedding materials; and waste management practices. All competencies will be assessed using the students' farms or with simulations established by the instructor.

47-090-429 Crop Management-Nitrogen Management 0.30 Credit

Students will identify key objectives to nitrogen use on the farm, nitrogen cycle in crop production systems, nitrogen sources, irrigation & nitrogen management, nitrogen budgeting and future resources. All competencies will be assessed using the students' farms or with simulations established by the instructor.

47-090-430 Financial Management-Farm Asset Management 0.55 Credit

Students will be provided information focusing on asset management within the farm business. Students will analyze asset acquisition, owning versus leasing versus custom hire; understand financial ratios that incorporate asset values; discuss methods of protecting assets through insurance policies; and discuss methods of transferring assets. All competencies will be assessed using the students' farms or with simulations established by the instructor.

47-090-434 Dairy Goat-Introduction to the Industry 0.20 Credit

Students will gain basic knowledge of the goat industry through farm tours and class time. This course will cover breeds, terminology, operations, and basics of the commercial goat operation. It will cover the differences between a good and poor operation, as well as how to establish a successful operation and begin purchasing animals. Practical application of an on-farm tour will help the student become familiar with the industry and the terms.

47-090-435 Dairy Goat-Writing a Business Plan 0.15 Credit

A business plan is an important management tool for a farm operation that provides strategic direction to the business's sustainability and profit opportunity. Students will identify the sections of a business plan, analyze the information to be included in each section, and then write a business plan for the dairy goat operation they are planning to operate. Students will build a plan for their operation with assistance from the course instructor and through peer reviewing.

47-090-436 Dairy Goat-Farm Records & Financial Mgmt 0.25 Credit

This course will focus on establishing farm financial records as well as analysis of the financial records. Students will discuss the management decisions that can be made from financial records, compare written versus computerized record keeping systems, and develop a plan for keeping financial records for their dairy goat operation. Students will be able to define the purpose of basic financial statements like a balance sheet, budget, and cash flow. Upon completion of this course, students will develop a balance sheet and outline the components needed to build a budget and cash flow for their dairy goat operation.

47-090-440 Dairy Goat-Nutrition 0.15 Credit

Students will learn basic nutrition guidelines for a commercial dairy goat operation. Students will identify common feed stuffs, analyze nutritional quality of common feed stuffs and discuss nutritional requirements needed for dairy does, bucks, and wethers. Students will calculate a balanced ration for a dairy goat herd using computer based resources.

47-090-441 Dairy Goat-Genetics and Selection 0.15 Credit

Through this course, students will learn how to select animals for their best genetic traits to maximize production and profit potential for a commercial dairy goat operation. Students will outline their farm's breeding program using DHIA (Dairy Herd Improvement Association) and ADGA (American Dairy Goat Association) resources to gain an adequate background in genetic evaluation. Students will complete a genetic plan that promotes the marketing strategy intended for their dairy goat operation.

47-090-443 Dairy Goat-Production Records and Analysis 0.15 Credit

Students will identify production records needed to analyze the success of a commercial dairy goat operation. Students will discuss methods of record keeping and will learn how to analyze production records by comparing to industry standards. During this course animal Identification options for proper record keeping will be analyzed. Students will identify and implement a recordkeeping system for their farm operation.

47-090-454 Goat Management Academy 0.20 Credit
The Goat Management Academy will include continuing education for dairy and meat goat farm producers covering nutrition, genetics, reproduction, financial management, risk management, business planning, milk and meat quality, herd health, recordkeeping, and marketing. Students will have the opportunity to network with farm producers and industry representatives.

47-090-499 Goat-Milking Facilities and Housing 0.20 Credit
Students will have the opportunity to learn basic principles of designing the correct facilities based on the environment, feeding system, waste removal systems, and factors which influence dairy goat health. Students will identify standard milk house requirements, parlor needs for dairy goat operations, and feed storage options. Students will discuss how facility needs will be balanced with labor availability and efficiencies. Practical hands-on applications in the areas of: milk house and parlor design, labor needs, and milking area maintenance will help students practice and solidify their skills.

47-103-407 Introduction to Microsoft 365 0.05 Credit
This course is an introduction to Microsoft 365. Students will learn to navigate the cloud powered platform to work and collaborate from anywhere by using the latest productivity apps, such as Microsoft Teams, Word, Excel, PowerPoint, Outlook, OneNote and more. Students will also learn how SharePoint and OneDrive help organizations share and manage content, knowledge, and applications to empower teamwork, quickly find information, and seamlessly collaborate across the organization.

47-103-410 Microsoft Teams Basic 0.05 Credit
In Microsoft Teams Basic students will learn to navigate the cloud powered platform to work and collaborate from anywhere by using one of the latest productivity apps, Microsoft Teams. Students will also learn the various ways Microsoft Teams helps organizations share and manage content, knowledge, and applications to empower teamwork, quickly find information, and seamlessly collaborate across the organization.

47-103-412 Microsoft To Do, Planner, and OneNote 0.05 Credit
This course will explore three powerful Microsoft tools for boosting productivity and streamlining project/task management: Microsoft To Do, Planner, and OneNote. Students will learn to navigate Microsoft To Do, create and manage task lists efficiently, and organize tasks using categories, due dates, and priority settings. Students will understand the core features and functionalities of Microsoft Planner for managing projects, assigning project tasks, setting deadlines, and tracking progress. Students will also learn to harness the power of Microsoft OneNote to create structured digital notebooks to document and categorize information, collaborate, and integrate tasks, checklists, and project-related content.

47-141-402 Spanish for the Workplace 1 0.15 Credit
Participants will learn about Hispanic/Latino culture and basic Spanish words and phrases to improve their understanding of and communication with native Spanish-speakers in the workplace. Topics covered will include: culture/traditions, introductory conversations, common Spanish phrases, basic workplace commands, making inquiries and asking questions, expressing conditions/emotions, and safety/emergency phrases

47-141-415 English Language Learner 0.40 Credit
In this course you will be provided comprehensive language instruction for students who are non-native English speakers. The purpose of the course is to enhance the student's communication skills in English, encouraging them to effectively participate in academic and everyday situations. Students will develop their listening, speaking, reading, and writing abilities through a variety of interactive activities and learning materials.

47-182-402 Lean-White Belt 0.20 Credit
Lean White Belt will provide the learner with an overview of Lean concepts and an introduction and review of the concepts of 5S Visual.

47-196-479 Leadership Academy 24 0.60 Credit
This Leadership Academy includes a full StrengthsFinder 2.0 assessment and discussion, in addition to curriculum on Stress, Time, and Change Management, Creating and Managing Work Teams, Managing Communication and Leadership. As with all Leadership Academies, first we Grow the Person, then we Develop the Leader and finally we Build the Team.

47-196-484 Leadership Academy-Person 0.30 Credit
This course encompasses previous Leadership Academy courses Time, Stress, and Change Management, as well as incorporating StrengthsFinder assessment, to help individuals focus on personal leadership skills.

47-196-489 Leadership Academy 36 0.90 Credit
This Leadership Academy includes StrengthsFinder2.0, Everything DiSC Workplace, Productive Conflict and Work of Leaders assessments and discussions in addition to added curriculum on Stress, Time and Change Management, Creating and Managing Work Teams and Managing Communication. As with all Leadership Academies, first we Grow the Person, then we Develop the Leader and finally we Build the Team.

47-196-492 Meeting Advantage 0.10 Credit
This course is designed as a stand alone course using the Franklin Covey designed content to assist participants in conducting efficient and effective meetings.

47-196-502 Courageous Conversations 0.10 Credit
Dialogue and accountability skills are foundational to inclusive and engaged workplaces. This course will help participants identify their conflict styles and offloading strategies, recognize go-to narratives and how to re-write new ones that align with their goals, and learn skills for engaging in dialogue and cultivating courage.

47-196-505 Leadership Academy 8 0.20 Credit
This Leadership Academy includes training on Core Values in addition to full StrengthsFinder 2.0 and Everything DiSC Workplace assessments.

47-196-509 Everything DiSC Workplace (6 hrs) 0.15 Credit
This training will teach participants to understand themselves and others while learning to appreciate different priorities, preferences and values each individual brings to the workplace. With personalized insights and actionable strategies, participants learn how to adapt to the style of others, ultimately improving engagement, collaboration, and the overall quality of the workplace.

47-196-511 Productive Conflict (4 hours) 0.10 Credit
This training will increase self-awareness around conflict behaviors. Participants will learn how to effectively respond to the uncomfortable and unavoidable challenges of workplace conflict. Rather than focus on a step-by-step process for conflict resolution, participants gain personalized techniques to curb destructive behaviors so that conflict can become more productive, ultimately improving workplace relationships and results.

47-196-512 Speed of Trust 0.20 Credit
Trust plays a critical role in building personal and professional relationships. This course is designed to provide students with the skills and knowledge necessary to cultivate trust and create a high-performance environment. This course focuses on enhancing trust at individual, team and organizational levels.

47-196-514 Servant Leadership (2 hrs) 0.05 Credit
In this course students will learn the necessary skills and knowledge to become effective servant leaders. Students will gain understanding of the fundamental concepts and characteristics of servant leadership and how they can be effectively applied in the workforce.

47-196-515 Project Management (6 hrs) 0.15 Credit
This training introduces the fundamental principles, tools, and techniques of project management. This course gives you the knowledge and strategies to successfully plan, execute, and deliver projects in a timely manner. By the end of the course, you will be equipped with the necessary skills to initiate, plan, execute, and close projects effectively.

47-311-400 Responsible Beverage Server 0.10 Credit
This course is designed for people wishing to become a bartender in the State of Wisconsin. Students apply state laws and local ordinances relating to alcohol beverage service, identify the effects of alcohol on the body and behaviors associated with impairments, describe ramifications of intoxication on management, staff, customers, and the public, and apply strategies to reduce potential liability. This course is a requirement for a person to obtain an operator's license for selling alcoholic beverages. It also meets training requirements for tobacco retailers.

47-442-408 GTAW – Stainless Steel 24HR 0.60 Credit
In this hands-on course students will learn how to make fillet and groove welds in all positions on 3XX stainless steel using the GTAW process in accordance with AWS specifications.

47-442-410 Welding - Open Lab 0.10 Credit
Students will work on welding skills and techniques while using specific processes, positions and materials.

47-449-440 Confined Space Entry Basics 0.15 Credit
After completion of this course, the student will identify a confined space and the psychological effects of a confined space. The student will explain the OSHA laws regarding confined space rescue. The student will demonstrate the competencies necessary to safely manage a confined space entry rescue. These skills will include atmospheric monitoring, use of personal protective equipment, rigging, and patient assessment and packaging.

47-458-404 CDL Preparation 0.60 Credit
This course introduces students to the operations of Commercial Vehicles in Wisconsin. Units of study include: CDL qualifications / disqualifications, how to analyze hazards by driving, the operations of an air brake system, identifying the different types of combination commercial vehicles, examining special considerations for tanker vehicles and hauling hazardous material, and how to perform pre-trip inspections. The student will prepare to write the State Exam to obtain a CDL Learner's Permit.

47-503-462 Fire Extinguisher Training (2 hrs) 0.05 Credit
This course covers the basic use of portable fire extinguishers. It is designed for a small group setting with a lecture that describes the construction and application of fire extinguishers and a lab that provides the student with practical hands-on operation with live fire.

47-503-483 Rope Rescue 1 Credit
This course is a pre-requisite to all technical rescue certification courses. This course addresses NFPA 1 Credit, Standards for technical Rescue Technical Professional Qualifications. Students will receive intensive hands-on training. Topics covered will include:
Laws and regulations, rescuer safety, victim management, site operations, rescue equipment, knots, anchors, and anchor systems, belaying, rappelling, lowering systems, raising systems, stretcher rigging and tending, maintenance, ropes and rigging.
A major portion of the course will be hands-on at a simulated rescue site.

47-503-494 Confined Space Rescue Technician 1 Credit
This course provides the knowledge and skills required to conduct confined space rescue at the technician level. Lecture topics include preplanning, hazardous materials identification, incident management, rescue factors, safety considerations, and operating procedures. Practical sessions include, air monitoring, lockout tagout, ropes and knots, confined space entry, and confined space rescue.

Pre-requisites:
Rope Rescue or Firefighter Training or EMT/Paramedic or HazMat

47-503-496 Introduction to Fire Inspection Principles & Practices 0.40 Credit
Upon completion of this course, the student will have the basic knowledge and skills to conduct fire inspections for the purpose of fire prevention.

47-503-710 Entry Level Firefighter 1.50 Credits
This course is designed to prepare the student to meet the minimum requirements for structural firefighting in the State of Wisconsin as outlined in SPS 330. Upon successful completion on the course, the student will be qualified to participate in structural firefighting operations as a member of a fire department. The course focuses on safe working practices and the use of personal protective equipment, as well fire ground operations including; building search and rescue; forcible entry procedures; hoseline deployment; use of ground ladders; tactical ventilation; fire suppression operations; and salvage and overhaul operations.

47-503-721 Firefighter I Certification (Part C) 0.90 Credit
This 36-hour course prepares the participant to be able to perform firefighting functions at a minimum nationally recognized level under direct supervision. Some of the 16 Wisconsin Technical College Districts will only offer this course as a 96+ hour course which incorporates Entry Level Firefighter Parts 1 & 2. The targeted audience is individuals who have completed the minimum firefighting training requirements as specified in Comm 30.08, Employment standards, Department of Commerce, Chapter 30, Fire Department Safety and Health, and desire, or are required, to increase their knowledge and skills base to the next level. This course, when taken in conjunction with the Entry Level Firefighter Part 1 (30 hours) and Part 2 (30 hours) courses, is designed to provide the Firefighter I candidate with the additional information needed to meet the job performance requirements (JPRs) defined in NFPA 1001, Standard for Firefighter Professional Qualifications, 2008 Edition, Sections 5.2 through 5.5. The participant must also take the Hazardous Materials Operation level course in order to meet the remainder of the NFPA Firefighter I JPRs. A written and practical skills certification exam is available to participants who successfully complete this course. A participant who completes this course and wishes to be certified has two years from the completion of the course to take the exams. Participants who successfully pass the certification exams will receive a State of Wisconsin Certificate with an IFSAC (International Fire Service Accreditation Congress) seal which can be accepted by other IFSAC accredited states or entities.

47-503-730 Firefighter II Certification 1.05 Credits
This 42-hour course prepares the participant to perform firefighting functions at an advanced nationally recognized level under general supervision. The targeted audience is individuals who have completed the training required to meet the Firefighter I JPRs in NFPA 1001, and desire to increase their knowledge and skills base to the next level. This course, when taken after completion of the Firefighter I and Hazardous Materials Operation Level is designed to provide the Firefighter II candidate with the information needed to meet the job performance requirements (JPRs) in NFPA 1001, Standard for Firefighter Professional Qualifications, 2008 Edition. A written and practical skills certification exam is available to participants who successfully complete this course. A participant who completes this course and wishes to be certified has two years from the completion of the course to take the exams. Participants who successfully pass the certification exams will receive a State of Wisconsin Certificate with an IFSAC (International Fire Service Accreditation Congress) seal which can be accepted by other IFSAC accredited states or entities

47-503-741 Entry Level Driver/Operator Part 1 Driving 0.30 Credit

This 12-hour course introduces the participant to the basic knowledge and skills necessary to perform fire apparatus driving and pumping duties for their respective fire departments. The targeted audience is individuals who expect to be appointed or have recently been appointed to driver/operator-pumper duties on their respective fire departments. This course, when taken in sequential order with Entry Level Operator-Pumper, is designed to provide the new pumper operator with the information needed to comply with the minimum pumper operator training requirements as specified in Comm 30.08, Employment standards, Department of Commerce, Chapter Comm 30, Fire Department Safety and Health.

47-503-742 Entry Level Driver/Operator Part 2 Pump 0.45 Credit

This 18-hour course introduces the participant to the basic knowledge and skills necessary to perform fire apparatus driving and pumping duties for their respective fire departments. The targeted audience is individuals who expect to be appointed or have recently been appointed to driver/operator-pumper duties on their respective fire departments. This course, when taken in sequential order with Entry Level Operator-Pumper, is designed to provide the new pumper operator with the information needed to comply with the minimum pumper operator training requirements as specified in Comm 30.08, Employment standards, Department of Commerce, Chapter Comm 30, Fire Department Safety and Health.

47-503-746 Entry Level Driver/Operator Part 3 Aerial Operation 0.15 Credit

This 6-hour course introduces the participant to the basic knowledge and skills necessary to perform fire apparatus driving and aerial operation duties for their respective fire departments. The targeted audience is individuals who expect to be appointed, or have recently been appointed, to driver/operator-aerial duties on their respective fire departments.

This course, when taken after completion of Entry Level Driver/Operator-Pumper, Part 2 is designed to provide the new aerial operator with the information needed to comply with the minimum aerial operator training requirements as specified in Comm 30.08, Department of Commerce, Chapter Comm 30, Fire Department Safety and Health.

47-503-748 Entry Level Driver/Operator Part 4 Water Tender Operations 0.15 Credit

This course will offer instruction in the safe operation of fire department water tenders. Classroom lecture and hands-on operation of department water tenders will help to prepare firefighters to understand the hazards of driving these special duty vehicles.

Pre-requisites:

Entry Level/Driver/Operator and Entry Level Driver/Operator Pumper courses

47-503-749 Entry Level Driver/Operator Part 5 Tow Vehicle/Trailer Oper 0.15 Credit

This course will offer instruction in the safe operation of fire department tow vehicles and trailers. Classroom lecture and hands-on operation of department tow vehicles will help to prepare firefighters to understand the hazards, proper hook-up and operation of tow vehicles and trailers.

Pre-requisites: Entry Level/Driver/Operator-driving and Entry Level Driver/Operator Pumper courses

47-503-763 Fire Officer I 1 Credit

This 40-hour course prepares the participant to perform firefighting supervisor functions at a minimum nationally recognized level. The targeted audience is individuals who have completed at least the training required to meet the Firefighter II JPRs of NFPA 1002, Standard for Firefighter Professional Qualifications, Chapter 4, and desire or are required to increase their knowledge and skills to progress to the Fire Officer I Level. Completion (not certification) of the 40-hour Fire Instructor I course is also required in order to become certified as Fire Officer I. This course is designed to provide the Fire Officer I candidate with the information needed to meet the job performance requirements (JPRs) in National Fire Protection Association (NFPA) 1021, Standard for Fire Officer Professional Qualifications, Chapter 2. Curriculum for the course is based on the Jones and Bartlett, Fire Officer Principles and Practices, 2nd Edition textbook. A written and practical skills certification exam is available to participants who successfully complete this course. A participant who completes this course and wishes to be certified has two years from the completion of the course to take the exam. Participants who successfully pass the certification exams will receive a State of Wisconsin Certificate.

47-503-780 Hazardous Materials Operations Level 0.50 Credit

This 16-hour course prepares the participant to perform the minimum hazardous material incident operations associated with firefighting functions at an advanced nationally recognized level under general supervision. The targeted audience is individuals who have completed, or are in the process of completing, the Firefighter I Job Performance Requirements (JPRs) in NFPA 1001. This course is designed to provide the Firefighter I candidate with the information needed to meet the JPRs in Chapter 5, Core Competencies for Operations Level Responders, and Section 6.6., Mission-Specific Competencies: Product Control, of NFPA 472. The participant must also take the Firefighter I course in order to meet the remainder of the NFPA Firefighter I JPRs. Participants who were certified as Firefighter I or Firefighter II prior to 2008 and wish to be certified to the Driver/Operator- Pumper/Aerial, Fire Officer I & II, or Fire Instructor, must have completed this course as a prerequisite to these certification levels.

47-503-790 Fire & Emerg Svcs Inst I (FESI I) 1 Credit

This 40 hour course prepares the participant to perform fire instruction duties at a minimum nationally recognized level.

This course is designed to provide the Instructor I Candidate (must be Certified FF II) with the information needed to meet the job performance requirements (JPRs) in National Fire Protection Association (NFPA) 1041, Standard for Fire Service Instructor Professional Qualifications, Chapter 2. Course curriculum is based on the International Fire Service Training Association (IFSTA) Fire and Emergency Services Instructor, 7th Edition Textbook. A written exam and 30 hours of supervised instruction will complete the certification process for this course. A participant who completes this course and wishes to be certified has two years from the completion of the course to take the exams and fulfill the supervised instruction requirement (30 hours). Participants who successfully pass the certification exams will receive a State of Wisconsin Certificate with an IFSAC (International Fire Service Accreditation Congress) seal which can be accepted by other IFSAC accredited states or entities.

47-503-921 Fire Investigation: First Responders 0.35 Credit

This two-day course presents a basic overview of a fire investigation. Students will review the basics of fire chemistry and develop an understanding of the role of the first responder in relation to fire suppression and fire investigation. The course will stress the importance of fire scene awareness, evidence identification, preservation, and the basics of a fire investigation. Students will develop an appreciation of the convergence of suppression, investigation, science, and law.

47-504-415 Jail Academy: Maintain Jail Security 0.20 Credit

Students will learn basic concepts, guidelines and skills for fulfilling an officer's role in a jail security program. Key focuses of training include searching inmates; control and use of jail keys and locking systems; conducting security checks; counting inmates; searching inmate living areas; control of weapons, tools, utensils and housekeeping equipment; and use of surveillance and communications equipment. Students will have the opportunity to practice skills and techniques in simulated situations.

Prerequisites:

Basic Jail Academy students must meet minimum standards as defined by the Wisconsin Training and Standards.

47-504-416 Jail Acad-Jail Hostage Response 0.10 Credit

Students will learn key concepts and guidelines regarding what to do in the event of being taken hostage in a jail. Students will learn indicators of possible pending hostage situations, and key hostage survival techniques in the event of a jail hostage situation. In addition, students will learn guidelines for proper action during a tactical operation to end a hostage situation. Finally, students will learn guidelines for proper action in the aftermath of a hostage situation, including guidelines for effective emotional survival, both short-term and long-term.

Prerequisites:

Basic Jail Academy students must meet minimum standards as defined by the Wisconsin Training and Standards.

47-504-418 Jail Acad-Admit and Release Inmates 0.20 Credit

Students will learn principles, concepts, legal requirements and skills involved in the processes of admitting and releasing inmates from jail custody. Key issues include the steps involved in receiving prisoners for intake, completing admissions records, orienting new inmates to the jail environment, determining classification for housing assignments and other purposes, and releasing inmates from custody. Students will practice key skills, including fingerprinting and completion of health screening forms.

Prerequisites:

Basic Jail Academy students must meet minimum standards as defined by the Wisconsin Training and Standards.

47-504-420 Jail Acad-Inmate Supervision and Behavior Control 0.30 Credit

Students will learn principles, guidelines and skills for supervising jail inmates and controlling inmate behavior. Key issues include the significance of jail security and inmate safety in effective supervision, skills for observing inmates, guidelines for effective staff-inmate relations, fraternization, and guideline to identify and avoid inmate manipulation attempts. In regard to inmate behavior control, both positive behavior control strategies and negative behavior approaches (punishment for rules violations) are featured. The state legal requirements for discipline of inmates are a key focus. Students will practice supervision and behavior control skills in simulated situations.

Prerequisites:

Basic Jail Academy students must meet minimum standards as defined by the Wisconsin Training and Standards.

47-504-422 Jail Acad-Super Special Inmate/Crisis Intervention 16 hr 0.40 Credit

In this course, students will learn concepts, guidelines and skills for proper supervision of special inmates in a jail setting, primarily including those who are emotionally distressed, mentally disordered, suicide risks, and/or developmentally disabled. Key issues to be covered include intake screening, recognition of problem situations or possible disorders, guidelines for management and supervision of inmates, and documentation. Students will also learn basic crisis intervention skills for responding to inmates undergoing various categories of crises. Students will practice key skills in simulated situations.

Pre-requisite:

Basic Jail Academy students must meet minimum standards as defined by the Wisconsin Training and Standards.

47-504-426 Jail Acad-Correctional Law 0.20 Credit

Students will learn key concepts and principles underlying legal requirements for jail operations and guidelines for protecting the legal rights of inmates. Key issues covered include rules and standards governing jail operations, structure of the court system, overview of civil liability, and key constitutional rights of inmates. Students will also learn how applicable Wisconsin statutes and Administrative Code requirements reflect or expand upon the broader constitutional protections for inmates.

Prerequisites:

Basic Jail Academy students must meet minimum standards as defined by the Wisconsin Training and Standards.

47-504-432 Police Update - Firearms 0.10 Credit

Any law enforcement class that has to do with firearms, i.e. Legal requirements, policies, techniques of handguns and shotguns, and all firearms range shooting.

47-504-442 Jail Academy Fire Safety 0.20 Credit

Students will learn basic concepts, guidelines and skills enabling them to fulfill the role of an officer in assisting with an overall fire safety program in a jail. Basic information on causes of jail fires and factors associated with fires and fire safety are a focus. Students will learn basic fire prevention and control guidelines. Key psychomotor skills taught include extinguishing small fires, responding to alarms, donning and using self-contained breathing apparatus, and search-and-rescue operations. Students will practice key skills.

Prerequisites:

Basic Jail Academy students must meet minimum standards as defined by the Wisconsin Training and Standards.

47-504-451 Defense/Arrest Tactics (DAAT) Refresher 0.10 Credit
Students assess contact and tactical situations, determine approaches, and practice verbal and physical exercises for taking and maintaining control of various situations. They review statistics and information about situations in which officers have been killed or assaulted and identify strategies to reduce risks in similar situations. They practice exercises in the use of non-lethal personal weapons, and identify the appropriate level of force to use given a set of facts and circumstances of a situation.

47-504-461 Vehicle Contacts Instructor 0.60 Credit
This course prepares Wisconsin Law Enforcement Standards Board (LESB) certified officers to effectively administer and teach the vehicle contacts training program. This course emphasizes teaching and learning techniques that promote active learning, support learners with a variety of learning preferences and needs, and generate continuous improvements in teaching and learning. The goal of this program is to prepare certified officers who are proficient in making vehicle contacts to deliver the LESB-approved vehicle contact curriculum.

Prerequisite:
Employment as a certified law enforcement officer.

47-504-516 Jail Academy Jail Officer Wellness 0.10 Credit
Students will learn the importance of a healthy lifestyle when working as a jail officer. The topics to be focused on include stress relaxation techniques and how to implement healthy habits.

Pre-requisites:
Acceptance into the Jail Academy

47-504-517 Jail Academy Phase I Testing 0.25 Credit
Students will participate in integration exercises on Phase I material and complete a written exam.

Pre-requisite:
Basic Jail Academy Students must meet minimum standards as defined by the Wisconsin Training and Standards.

47-504-518 Jail Academy Investigations 0.05 Credit
Jail Officers will learn the basic investigation skills needed to respond to crime scenes. The focus will be on protecting the scene and evidence.

Pre-requisite:
Acceptance into the Jail Academy

47-504-519 Jail Academy: Suicide Prevention 0.10 Credit
Students will learn how to recognize the clues and signs of a co-worker, or themselves, in crisis which could lead to suicide. The students will also learn to ask the question: Are you thinking of committing suicide?

Pre-requisite:
Acceptance into the Jail Academy

47-504-521 Jail Academy: POSC II 0.60 Credit
Students focus on the hands on skill development of Principles of Subject Control.

Pre-requisite:
Basic Jail Academy Students must meet minimum standards as defined by the Wisconsin Training and Standards.

47-504-522 Jail Academy Phase II Testing 0.55 Credit
Students will participate in integration exercises, training scenarios, and evaluation scenarios as part of training experience and complete a written exam.

Pre-requisite:
Basic Jail Academy Students must meet minimum standards as defined by the Wisconsin Training and Standards.

47-504-535 Jail Academy: Respect Cultural Diversity 0.10 Credit
In this 200 hour jail academy course, students will examine the different cultures found in the jail and the community. They will learn how their own culture influences their behavior including biases they weren't aware that they had (implicit biases). Further, they will examine the terms and cultures surrounding those in the SOGIE (sexual orientation, gender identity, and gender expression) community. Each of these areas will be discussed in relation to how they pertain to creating safety and security in the jail.
Pre-requisite: Basic Jail Academy students must meet minimum standards as defined by the Wisconsin Training and Standards.

47-504-538 Law Enforcement In-Service Training-6 hr 0.15 Credit
To provide law enforcement agencies a method to give consistent training to the members of their agency. This training is intended to provide all law enforcement agencies with their local training requirements. All training is developed with the agency's training personnel and Southwest Tech's staff. Southwest Tech's staff will be the training agency and instructors. Lesson plans will/are developed by Southwest Tech instructors to meet the needs of the agency utilizing this service.

47-504-539 Law Enforcement In-Service Training-8 hr 0.20 Credit
To provide law enforcement agencies a method to give consistent training to the members of their agency. This training is intended to provide all law enforcement agencies with their local training requirements. All training is developed with the agency's training personnel and Southwest Tech's staff. Southwest Tech's staff will be the training agency and instructors. Lesson plans will/are developed by Southwest Tech instructors to meet the needs of the agency utilizing this service.

47-504-540 Transition to Defensive Tactics Instructor 0.20 Credit
This is the 8-hour transition course to Defensive Tactics for either POSC or DAAT certified instructors. DAAT and POSC Instructors attending this transition course are expected to review the DAAT and POSC basic course student manuals prior to attending class. Special focus should be on familiarization with the skills competencies listed in the course guide, the incident response RESPOND model (DAAT) and the First Responder Philosophy (POSC).

47-504-542 Vehicle Contact Instructor - HRVC Transition 0.20 Credit
This is the 8-hour transition course is designed to update instructors on changes made to the Vehicle Contacts curriculum as well as train instructors on the new Wisconsin High-Risk Vehicle Contact (HRVC) procedure. At the end of this course, Vehicle Contact Instructors should be able to: teach new content for vehicle contacts on Connected and Automated Vehicles (CAVs), ATV/UTV, and snomobile contacts; identify limitations and hazards of the legacy high-risk vehicle contact; identify the primary advantages of rear-of-vehicle HRVC tactics; describe the basic movement and positioning for HRVC application in the field; apply appropriate patrol vehicle positioning for HRVC; demonstrate the proper exit sequence for HRVC; demonstrate appropriate officer positioning behind the patrol vehicles to maximize coverage of the target vehicle and officer use of ballistic cover; demonstrate HRVC detention/apprehension techniques with ideal vehicle positioning and compliant suspect(s); list and describe the five non-compliant responses typically exhibited by suspects during HRVC; demonstrate appropriate techniques for addressing each of the non-compliant suspect apprehension scenarios; demonstrate appropriate techniques for adjusting to/coping with alternative/non-ideal vehicle positioning; and demonstrate a generalized understanding of HRVC principles and procedures through safe and effective execution of non-compliant scenario exercises.

Pre-requisite:
Must be a current LESB Vehicle Contacts Certified Instructor to attend. Attendees will need to submit the DJ-LE-336 Topic Specific Course Application, along with their ACADIS Professional History Report and DJ-LE-310 Student Release of Information Form.

47-504-902 Jail Academy: Ethics & Ethical Decision Making **0.10 Credit**
Students will learn basic concepts and guidelines regarding ethics and ethical decision-making in a correctional environment, such as a county jail. Students will explore belief systems, social pressures, moral problems, decision-making and the consequences of decisions. The course includes a specific focus on common ethical problems and dilemmas that may occur in a jail setting. Basic Jail Academy students must meet minimum standards as defined by the Wisconsin Training and Standards.

47-504-985 Physical Readiness Test **0.05 Credit**
All Law Enforcement academy candidates and law enforcement recruits must complete and pass the physical readiness test. The test must be completed at a DOJ certified law enforcement academy. This test will meet that standard.

Pre-requisite:
Physicians Assessment

47-504-995 Crisis Intervention Team Training **1 Credit**
CIT is a comprehensive training session designed to assist first responders in recognizing and understanding the signs and symptoms of mental illness. Students will learn various options to facilitate de-escalation of the mental health consumer in crisis, legal issues, resources in your community, and how to reduce the potential for crisis and injury to all involved.

47-531-410 NREMT Practical Test **0.10 Credit**
We would like the EMT students to be able to register and pay their practical testing fees online through the CE portal.

47-531-411 NREMT Advanced Practical Test **0.10 Credit**
We would like the AEMT students to be able to register and pay their practical testing fees online through the CE portal.

47-531-414 Heartsaver CPR/AED First Aid **0.15 Credit**
This course teaches basic first aid and is designed to meet OSHA regulations. First aid basics include topics such as scene safety, finding the problem, calling for help, and more; Medical emergencies (including choking, breathing problems, shock and more); Injury emergencies (including actions for bleeding, broken bones, burns and more); Environmental emergencies (including actions for bites and stings, temperature-related and poison emergencies). Adult CPR and AED is included in this course. Optional modules include child and infant CPR.

47-531-436 BLS for Healthcare Provider-CPR **0.10 Credit**
This course provides instruction in the critical concepts of high-quality CPR and the AHA Chain of Survival. The course includes 1-rescuer and 2-rescuer CPR/AED for adult/child/infant. The differences between adult child and infant rescue techniques will be learned. Other skills such as bag-mask techniques for adult, child and infant, as well as introduction to CPR with an advanced airway will be taught. Rescue breathing and relief of choking for adult, child and infant will be taught as well. This course fulfills the requirements for CPR for the health related courses offered through Southwest Wisconsin Technical College.

47-531-437 BLS for Healthcare Provider-CPR Recertification **0.05 Credit**
This course provides recertification in the critical concepts of high-quality CPR and the AHA Chain of Survival. The course includes 1-rescuer and 2-rescuer CPR/AED for adult/child/infant. The differences between adult child and infant rescue techniques will be learned. Other skills such as bag-mask techniques for adult, child and infant, as well as introduction to CPR with an advanced airway will be taught. Rescue breathing and relief of choking for adult, child and infant will be taught as well. This course fulfills the recertification requirements for CPR for the health related courses offered through Southwest Wisconsin Technical College.

47-531-443 Evaluation for BLS for HCP Recert **0.05 Credit**
This is the practical evaluation component of the Health Care Provider CPR recertification course (online version). Students must be evaluated by a CPR instructor after taking the on-line BLS for HCP recert course. Students must demonstrate the practical skills from the course.

Prerequisite:
Online course through American Heart Association

47-531-468 Evaluation for Heartsaver CPR/AED and/or FA **0.05 Credit**
This is the practical evaluation component of the Heartsaver CPR/AED and/or First Aid course (online version). Students must be evaluated by a CPR instructor after taking the on-line Heartsaver CPR/AED, Heartsaver First Aid, or Heartsaver CPR/AED with First Aid course. Students must demonstrate the practical skills from the course.

Prerequisite:
Online course through American Heart Association

47-533-500 Sign Language Basics **0.25 Credit**
Students will learn the elements of American Sign Language including handshape, motion, and place of articulation. This course will teach students the conversational and cultural behaviors needed for beginning level conversation while building on their signing skills and vocabulary.

47-620-402 Hydraulics-Pneumatics **0.50 Credit**
In this course students will gain a strong foundation in the principles, applications and maintenance of hydraulic and pneumatic systems. Students will understand the basic principles of hydraulics and pneumatics, and their applications in different industries. Students will engage in hands on lab using trainers, and will gain competence in understanding, troubleshooting and maintaining hydraulic and pneumatic systems.

47-620-419 Introduction to Programmable Logic Control (PLC's) **0.60 Credit**
No prior automation knowledge is assumed for this introductory level class which explores ladder logic programming, utilizing the RS Logix's 5000 platform for programming. Topics covered will be basic logic, including bits, timers, counters, and math and compare functions to perform real world applications.

47-620-423 Motor Controls **0.80 Credit**
Students will learn to develop and read schematics, including ladder logic, wire typical relay applications, test and monitor A/C electrical equipment and troubleshoot equipment as necessary. Student will also learn to install and troubleshoot relay and variable frequency drive control A/C electric motors found in industrial and commercial applications.

47-620-430 Hydraulics-Pneumatics (4 hrs) **0.10 Credit**
Students examine the principles of fluidic and pneumatic power. Students investigate the operation and applications of devices used in these systems along with symbolic representation of these devices. Utilizing this information the student will build, analyze, and troubleshoot hydraulic and pneumatic circuits.

47-620-431 Basic Troubleshooting **0.10 Credit**
This course provides students with essential knowledge and skills to diagnose and resolve common issues in electro-mechanical systems. Students will gain fundamental understanding of the principles and components involved in electro-mechanical systems, including electrical circuits, motors, switches, relays, and sensors. Students will implement troubleshooting techniques, practice safety protocols, and learn system troubleshooting methods.

47-620-432 AC/DC Theory 0.10 Credit
This course is designed to provide students with comprehensive understanding of alternating current (AC) and direct current (DC) principles. Students will learn the fundamental concepts and theories behind AC/DC electrical systems. They will gain knowledge and skills necessary to analyze, interpret and troubleshoot electrical circuits, laying the groundwork for future hands-on applications.

47-620-433 Mechanical Power 0.10 Credit
This course will give students the insight on mechanical power systems while focusing on the electro-mechanical components. Students will develop understanding of electro-mechanical devices and the systems and components that make up the devices. This course features hands on practical exercise and lectures that will build on the necessary skills to analyze, maintain, and troubleshoot mechanical power systems.

50-413-501 Industrial Electrician I 4 Credits
Students demonstrate electrical safety and first aid; choose and properly utilize tools of the trade for installation, repair and test electrical devices; apply basic electrical theory to basic wiring; and begin to use the National Electric Code. Students must be indentured in the Industrial Electrician Apprenticeship Program.

50-413-502 Industrial Electrician II 4 Credits
Students apply the theory of magnetism and electromagnetism (generation and utilization) to motor control, line diagrams and devices using basic trigonometry, and code wiring methods. Students must be indentured in the Industrial Electrician Apprenticeship Program.

50-413-503 Industrial Electrician III 2 Credits
Students apply AC theory while measuring AC resistive, inductive, capacitive and combination circuits, using various measuring instruments and math formulas.

50-413-504 Industrial Electrician IV 2 Credits
Students examine advanced motor control (contractors, magnetic starters, timers and other control devices), along with transformers for control and distribution of electricity.

50-413-505 Industrial Electrician V 2 Credits
Students apply power factor correction, recognize the different types of AC motors (single phase), power distribution systems, specialty transformers, and code sections covering them.

50-413-506 Industrial Electrician VI 2 Credits
Students work with 3-phase motors, look up and apply the National Electric Code sections covering motor installation, electromechanical and solid state motor control.

50-413-507 Industrial Electrician VII 2 Credits
Students control processes using industrial solid state devices and apply digital fundamentals theory for industrial uses.

50-413-508 Industrial Electrician VIII 2 Credits
Students program electronically programmable devices, smart motor controllers and programmable logic controllers.

50-413-521 Construction Electrician I 2 Credits
Students practice basic and electrical safety, choose and properly utilize hand and power tools of the trade, and begin to use the National Electric Code and basic math.

50-413-522 Construction Electrician II 2 Credits
Students apply basic electrical theory and test equipment, look up and apply the National Electric Code covering devices of the trade beginning with commercial and residential wiring.

50-413-523 Construction Electrician III 2 Credits
Students apply electrical AC theory while using DC-AC motors to explore grounding, conduit bending, boxes and fitting.

50-413-524 Construction Electrician IV 2 Credits
Students examine conductor installation, cable traps, conductor termination and splices to be used in the installation of electrical services, circuit breakers and fuses, motor control devices, and electric lighting.

50-413-525 Construction Electrician V 2 Credits
Students gain knowledge in loading calculations, conductor selection, over current protection, raceways and boxes, wiring devices, and distribution equipment.

50-413-526 Construction Electrician VI 2 Credits
Students work with distribution system transformers, basic lighting, motor calculations, motor maintenance, motor controls, electricity in HVAC, and hazardous locations.

50-413-527 Construction Electrician VII 2 Credits
Students gain knowledge in load calculations, commercial/industrial lighting, specialty lighting, standby and emergency systems, and basic electronic theory.

50-413-528 Construction Electrician VIII 2 Credits
Students work with fire alarm systems, specialty transformers, advanced solid state controls, HVAC controls, welding machinery, heat tracing, and freeze protection.

50-413-535 Construction Safety/Health OSHA 1 Credit
The students develop a safety consciousness for working on construction sites. This is accomplished by studying the OSHA Code of Federal Regulations for the construction industry. Students gain knowledge through instructor presentations, class discussions, video presentations, and learning exercises. Students receive an OSHA card upon successful completion of this course.

50-427-512 Level & Transit Plumbers 0.75 Credit
Students practice using the builder's level, transit, and laser to layout building lines, grades, set pipe runs, and measure elevations and distances.

Prerequisites:
Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license

50-427-558 Isometric Interpretation & Drawing 0.50 Credit
This course will instruct the apprentice in the different areas of paper and pencil drawing. By using drafting tools the apprentice will draw plan view, isometric, cross section, elevation, and detail drawings. Using industry standards, the apprentice will label the drawings they have completed. The drawings will also be sized and vented per Wisconsin Administrative Code, Chapters 81-87.

50-427-751 Sanitary Drains 1 2 Credits
Plumbing related instruction of sanitary drain systems. Course includes a review of codes and trade practices related to sanitary drains, drainage systems, components and applications.

Prerequisites:
Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-752 Vents and Venting Systems**2 Credits**

This course is designed to provide the apprentice with the skills to identify and design sanitary vent piping in a plumbing system in accordance with the Wisconsin Plumbing Code. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations.

Prerequisites:

Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-753 Water Distribution 1**2 Credits**

This course provides the apprentice with the skills to identify, design, install and service various applications for water supply systems that are listed in plumbing codes. Apprentices will use the code language and tables to in various plumbing systems in accordance with the Wisconsin Plumbing Code. Course topics will include commercial to single family and private well pump systems. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations.

Prerequisites:

Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-754 Water Distribution 2**2 Credits**

This course provides the apprentice with the skills to identify, design, install and service cross connection controls, water treatment equipment and multi-purpose piping systems in various plumbing systems in accordance with the Wisconsin Plumbing Code. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations.

Prerequisites:

Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-755 Sanitary Drains 2**2 Credits**

This course provides the apprentice with the skills to identify, design, install and service various applications for storm water, clear water, and drainage systems. Apprentices will use the code language and tables to in various plumbing systems in accordance with the Wisconsin Plumbing Code. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations.

Prerequisites:

Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-756 Private On-site Wastewater Treatment Systems (POWTS) 2 Credits

This course provides the apprentice with the skills to identify, design, install and service various applications for private onsite wastewater treatment systems that are listed in plumbing codes or individual component manuals. Apprentices will use the code language and tables to in various plumbing systems in accordance with the Wisconsin Plumbing Code. Other topics will include pretreatment, soil evaluation, site planning and new technologies. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations.

Prerequisites:

Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-757 Green Plumbing Applications**2 Credits**

This course provides plumbing apprentices with an introduction to green applications. Apprentices will be instructed on how to identify, install and maintain a variety of green products and systems. They will apply the Wisconsin Plumbing Code to various installations. This introduction will give an apprentice the basic knowledge to study for a variety of green certifications.

Prerequisites:

Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-758 Plumbing Advanced Topics/TSA**2 Credits**

This course provides the apprentice with the opportunity to select and complete an applied plumbing project in collaboration with the instructor. Projects will apply the skills required to identify, design, install and service various plumbing applications that are listed in plumbing codes. Apprentices will use the code language and tables to in various plumbing systems in accordance with the Wisconsin Plumbing Code. The course builds upon the theory, work experience, and the application of plumbing code principles addressed in previous coursework to support completing an applied hands-on project.

Prerequisites:

Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-760 Plumbing Applications**1 Credit**

Examines a variety of real-life applications used in the plumbing trades and typically covered in paid related instruction. The units address the hows and whys behind joints and connections, rigging and signaling, hydraulics and pneumatics, plumbing and the environment, gas pipe applications, and applied electricity for plumbers.

Prerequisites:

Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-761 Plumbing Service and Repair**1.25 Credits**

This course is designed to provide apprentices with the academic and hands-on experience needed to perform plumbing service and repair tasks. Emphasis is placed on the safe and responsible use of tools and equipment. Topics include clogged drains, garbage disposers, water treatment equipment, water closets, urinals, flush valves, cold weather plumbing problems, water systems, pumps and faucets.

Prerequisites:

Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-762 Plumbing Blueprint Reading**1.25 Credits**

Provides instructional material for plumbing apprentices to develop the ability to interpret trade blueprints and to plan the installation of the required plumbing. Skills covered include identifying blueprint features, interpreting specifications, reading a blueprint for the purpose of layout work, listing material from print, and coordinating installation of piping with other trades. Blueprint reading practice will be offered while working with an actual print.

Prerequisites:

Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-763 Plumbing PRI Independent Study 1 Credit

Provides additional hours for plumbing apprentices who require time to complete their 572 hours of paid related requirement. Up to 72 hours can be scheduled as need in an independent study format. Course hours can be used to make up for time lost due to injury or illness, or to catch-up apprentices who start mid-term for example.

Prerequisites:

Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-770 Plumbing PRI Independent Study-Makeup Hours 0.50 Credit
Provides additional hours for plumbing apprentices who require time to complete their 572 hours of paid related requirement. Up to 72 hours can be scheduled as need in an independent study format. Course hours can be used to make up for time lost due to injury or illness, or to catch-up apprentices who start mid-term for example.

Prerequisites:

Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-620-701 Trade Math Review for Mechatronics Apprentices 1 Credit
Course competencies include building apprentice skills working with fractions, decimals, formulas and ratios commonly used by the trade. Measurement, tolerances and interpreting trade related information will help apply math concepts to industrial and manufacturing work processes. Basic algebra, geometry and trigonometry will be applied to mechatronics job duties and tasks. Converting between US and metric units is also included. Course provides a foundation for mechanical and electrical problem-solving involving math. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-702 Mechatronic Principles 2 Credits
Course learning outcomes will examine both introductory mechanical & electrical concepts as a foundation for future coursework and on-the-job learning. Troubleshooting principles associated with mechatronics will also be introduced. Apprentices will explore safety, rigging, measurement, mechanical principles, electrical principles, mechanisms, metallurgy, and troubleshooting. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-703 DC Electricity for Mechatronics 1 Credit
This course introduces the fundamental concepts and computations related to DC electricity. Emphasis is placed on circuit analysis and the problem-solving skills necessary for the maintenance of mechatronic systems and manufacturing equipment. Competencies related to metering and safe use of measuring devices are included. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-704 AC Electricity for Mechatronics 1 Credit
This course is designed to introduce the mechatronic technician apprentice to the basic concepts of alternating current. Emphasis is placed on circuit analysis and the problem-solving skills necessary for the maintenance of mechatronic systems and manufacturing equipment. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-705 Motors & Motor Control for Mechatronics 2 Credits
This course examines the fundamentals of electric motors and motor control. Apprentices will learn to recognize and draw basic symbols, use the language of motor control, and apply these in industry adopted formats. Apprentices will also learn to draw and read ladder and wiring diagrams, and be introduced to the logic used in motor control. Learners will apply this logic to correctly interpret, install, service, and wire control circuits. Wiring of panels, machines, and systems will also be examined. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-706 Electrical Codes for Mechatronics 1 Credit
Apprentices will examine the National Electric Code and apply information to work practices involving mechatronic systems. Terminology needed to communicate and coordinate electrical work with other trades will be explored. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-707 Welding Basics for Mechatronics 1 Credit
Course compares common welding processes and develops apprentice skills related to welding, cutting, heating and using oxy-gas. Welding with arc and MIG will help develop competency working with metal. Additional course learning outcomes may include common cutting and joining techniques associated with applicable trade work processes. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-708 Fluid Power Systems for Mechatronics Apprentices 2 Credits
Course learning outcomes include inspecting, testing, servicing, and troubleshooting hydraulic, pneumatic, compressed air, and vacuum systems. Apprentices will review safety procedures for various common maintenance tasks. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-709 Servos and Drives for Mechatronics 1 Credit
Course introduces concepts, terminology, and safety associated with drives and servos used in industry and manufacturing. Course is designed to give the apprentice the knowledge required to program, service and maintain variable frequency drives and related equipment. Course learning outcomes include setting up and programming drives in a lab, shop or training center setting. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-710 Power Transmission Systems for Mechatronics 1 Credit
Course learning outcomes include examining mechanical power transmission systems and components. Belts, chain drives, gears & gear drives, couplings, and clutches & brakes will be examined. Apprentices will develop skills inspecting, installing, and maintaining power transmission systems and troubleshooting failures. Apprentices will also learn about safety, documenting work performed, communicating the status of work, and working collaboratively. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-711 Machining Concepts for Mechatronics 2 Credits
Course introduces cutting, drilling, lathes, and milling operations to apprentices in mechatronics. Course topics also include work holding devices, measuring tools and measurement, safety, machine guards, tooling, print reading, and speeds & feeds. Math skills will be applied to machining related work practices. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-712 Introduction to Programmable Logic Controllers 2 Credits
This course is designed to teach the fundamentals of programmable logic controller and its programming software. The course will introduce terminology, concepts, schematic reading and basic programming. Technologies and PLC use in manufacturing and mechatronic systems will be emphasized. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-714 HMI Technologies & PLC Applications for Mechatronics 2 Credits
Human machine interface devices, software and technologies will be examined for mechatronic systems. Apprentices will work in a lab/shop/training center setting to create touchscreens, set-up networks, and configure systems. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-715 Introduction to Robotic Systems for Mechatronics 2 Credits
Course introduces the apprentice to the robot teach pendant and methods of robot jogging. Learners will be taught to replace servo motors, re-master the robot, and back up robot software and programs. Maintenance, servicing and safety will be emphasized. Cable management systems will be examined. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-716 Introduction to Robotic Integration 3 Credits
Mechatronic apprentices will explore offsets, vision systems and system integration using robotic simulation and capstone project. The project will tie everything learned during their apprenticeship together – safety, machine integration, vision systems, CNC, machine applications for robotics, troubleshooting, and work documentation. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

73-851-710 Communication 1 3 Credits
Students write clear, complete sentences with correct grammar, give and follow directions, and demonstrate effective listening skills. Learners compose paragraphs, letters, documents, and job applications. Resources such as directories, schedules, and maps are used to apply written and oral skills to daily living.

73-854-710 Math 1 3 Credits
Students use addition, subtraction, multiplication, and division with whole numbers and fractions. Learners apply the English measurement system, manage personal finances, demonstrate the basic functions of a calculator, and identify geometric shapes. Students use estimation in problem solving and check answers for logical outcomes.

73-856-710 Science 1 3 Credits
Students establish a knowledge base in personal hygiene, nutrition, plants, animals, the human body, ecosystems, the universe, laws of matter and motion, and simple machines. Students relate this knowledge to life situations and job or learning goals.

73-858-710 Reading 1 3 Credits
Students develop a basic sight vocabulary, use word attack skills to decode words, comprehend a variety of written and illustrative materials at a literal level and transfer skills to the workplace, school, and everyday life. Learners employ basic learning strategies to process written materials, use informational resources, and demonstrate responsibility for learning.

73-859-710 Social Studies 1 3 Credits
Students establish a basic knowledge of people, places, and environments and their relationship to world history and geography. Learners demonstrate knowledge of cultural diversity and the advantages of existing within a global economy. Students gain content knowledge through use of various resources and interaction with others.

73-860-710 Digital Literacy 1 3 Credits
Through this course students will develop basic computer skills: operating a computer, using the mouse and keyboard, identifying computer devices, navigating the Windows operating system, creating and organizing files, using common software applications (ex: Microsoft Word and email), and accessing social media. In addition, students will learn how to safely access the internet and identify security threats.

73-862-710 Employability Skills 1 3 Credits
Students participate in various self-awareness exercises and acquire knowledge of expectations in school/work settings. Learners complete interest and personal style inventories, set personal short-and long-term goals, explore career clusters and sources of information about job opportunities.

74-851-720 Communication 2 3 Credits
Students compose compound and complex sentences, and combine sentences into unified paragraphs. Students select appropriate format and use the writing process to compose written documents, including essays. Learners edit work and revise errors using various resources and technology. Communication skills are applied to create messages, give and receive criticism, solve problems, and follow rules for group interaction.

74-854-720 Math 2 3 Credits
Students apply decimals, percents, probability, ratio and proportion to real life situations. Learners use the metric measurement system, interpret tables and graphs, apply basic geometric concepts and formulas, and master pre-algebra skills. Learners apply concepts to real life situations such as tax forms, consumerism, and budgeting. Students develop a sense of numeracy, using mathematical language, and apply critical thinking to problem solving.

74-856-720 Science 2 3 Credits
Students develop a broader knowledge in physical science, environmental issues, and health. Learners master scientific concepts including climate, cell theory, genetics, energy, and basic chemical reactions. Students apply the scientific method to integrate these concepts into daily life.

74-858-720 Reading 2 3 Credits
Students develop independent reading skills. Students use word analysis strategies, build vocabulary, and comprehend at an inferential and critical level, interpret context clues, and apply information from content. Students set goals, manage time and resources, select appropriate materials for tasks, and use technology.

74-859-720 Social Studies 2 3 Credits
Students develop a basic knowledge of the United States including history, geography, sociology, and psychology. Learners demonstrate knowledge of rights, freedoms, responsibilities, and beliefs that support life in a democratic republic. Students summarize the roles that individuals, groups, and institutions play in regard to economic, cultural, political, and foreign policy issues.

74-860-720 Digital Literacy 2 3 Credits
Students will build on the concepts learned in Digital Literacy 1 (73-860-710). The student will use Windows and the Windows 10 Operating System. They will develop skills needed to manage documents, create and send email, back up files, search the internet, and identify security features and threats.

74-862-720 Employability Skills 2 3 Credits
Students explore sound practices related to getting and keeping a job. Learners complete a job application, resume, cover letter, post-interview letter, and job interview. Students identify appropriate ways to dress for a job. Students identify appropriate ways to adjust to a new job and to cope with a job loss or rejection.

75-861-710 Beginning English as a Second Language (ESL) 3 Credits
Students practice understanding, speaking, reading and writing basic English skills. In listening, the student comprehends short utterances, simple courtesy expressions, and main themes. In writing, students copy, list and label concrete terms and fill in simple autobiographical information on forms. In reading and speaking, students recognize and communicate limited sight-word vocabulary.

75-861-730 Low Beginning English as a Second Language 3 Credits
Students listen to decipher the main idea of a dialog. Students read short passages with general comprehension and produce simple oral and written sentences.

75-861-750 High Beginning English as a Second Language 3 Credits
Students understand questions and answers, and hold simple face-to-face conversations. In reading, students read for information and identify supporting details. In writing, students write short letters and paragraphs using simple grammatical structures.

75-861-770 Low Intermediate English as a Second Language 3 Credits
Students converse with native speakers and understand familiar topics. In listening, students identify mood and attitude of the speaker, and master polite expressions. In reading, students use context clues, and skimming and scanning skills. In writing, students take notes in class and write short essays which are comprehensive to a native speaker.

75-861-790 High Intermediate English as a Second Language 3 Credits
Students communicate at work and can satisfy the social demands of conversation with sensitivity to both informal and formal language. In listening, students comprehend abstract discussions. In writing, students use both informal and formal prose, can paraphrase and summarize, and can produce complex sentence structures with accuracy.

75-861-791 Advanced English as a Second Language 3 Credits
Students write clear, multi-paragraph essays, comprehend and participate in all modes of communication effectively as well as comprehend reading materials for everyday life. Students increase and enhance command of the English language.

76-851-730 Communication 3 3 Credits
Students apply knowledge of the eight parts of speech, grammar and usage, and sentence mechanics to increase the quality of written and spoken communication. Learners write sentences, paragraphs, and essays to convey meaning clearly and correctly. Students use resources, technology, critical analysis, teamwork, and problem-solving skills to continually improve communication. Learners transfer these skills to other courses and settings.

76-854-730 Math 3 3 Credits
Students apply algebra and geometry concepts such as exponents, radicals, equations, scientific notation, formulas, and triangle theory. Learners develop graphs and tables, interpret statistics, and apply English and metric measurement systems. Students select appropriate technology and value the use of math in other courses and daily life.

76-856-730 Science 3 3 Credits
Students utilize the fundamental principles of biology, chemistry, and physics in investigation of science related issues. Learners research topics, analyze scientific data for validity and application of daily life, and report the findings. Students assess the interrelatedness of science, technology, and society.

76-857-701 HSED Health 3 3 Credits
Students will assess their current health practices and develop goals for improved health. Topics covered include: physical and emotional health; sexuality and relationships; drugs, alcohol and tobacco; communicable diseases; safety and first aid and environmental health. At the completion of this course, students will be able to pass the HSED Health examination.

76-858-730 Reading 3 3 Credits
Students apply critical thinking to analyze word origins, develop a specialized vocabulary, assess content validity, and adjust reading strategies to the difficulty of the material. Students organize, integrate, and reconstruct information from multiple sources, including prior experience. Students apply reading strategies and monitor effectiveness of their own learning. Learners transfer these skills to other courses and settings.

76-859-730 Social Studies 3 3 Credits
Students review a basic knowledge of history, political science, geography, economics, sociology, and psychology as they relate to world issues and concerns. Learners access information from a variety of resources in order to be informed citizens who impact policy formation. Students analyze their own and other opinions on important issues. Students perform an in-depth study of state and federal constitutions, local government operation, and the rights and responsibilities of U.S. citizens.

76-859-731 Civics 3 3 Credits
Through this course students will prepare to take the 100 question Civics Examination that is required for all students earning their GED/HSED in the State of Wisconsin. The concepts of government and citizenship will be explored.

76-862-730 Employability Skills 3 3 Credits
Students prepare to make a smooth transition into a specific occupational training program or meaningful employment. Learners compile current data on technological updates, job trends, and employment statistics in a field of their choice. Students apply sound practices related to getting and keeping a job.

76-890-701 Adult Basic Education Pathway Orientation 1 Credit
As a result of this course, students will explore the different options available to them in the Adult Basic Education program. Students will complete the TABE or a TABE-CLAS-E assessment. They will identify their goals and develop a Personal Education Plan.

77-851-720 Communication Review: Technical Diploma 3 Credits
Through this course students will develop writing skills that cover standard English practices and organization of an essay. Writing assignments are designed to help the learner grasp fundamental rules of English grammar and organize ideas. This course develops a student's ability to structure their thoughts in sentences, paragraphs, and essays within their technical degree coursework.

77-851-725 Communication Review: Associate Degree 3 Credits
Through this course students will develop writing skills that cover standard English practices and organization of an essay. Writing assignments are designed to help the learner grasp fundamental rules of English grammar and organize ideas. This course develops a student's ability to structure their thoughts in sentences, paragraphs, and essays within to their associate degree coursework.

77-851-755 English Essentials 1 Credit
English Essentials is designed to help students improve their writing skills so that the knowledge can competently be applied in other courses and settings. Students will learn and apply standard practices of American English grammar, word usage, spelling, and sentence mechanics to write sentences, paragraphs, and multi-paragraph documents.

77-854-701 Pathways to Quantitative Reasoning 1 Credit
Students in Pathways to Quantitative Reasoning will review algebra skills including graphing linear equations, and using exponents, and scientific notation. Students will use dimensional analysis to convert both US and Metric measurements. Students will use critical thinking skills and tools such as sets, Venn diagrams, inductive and deductive reasoning, and truth tables to analyze simple and compound statements. Students will learn statistical tools to collect and organize data and to describe the data using measures of central tendency and dispersion. Students will use basic probability tools to understand the probability and/or odds of various scenarios. Students will learn how to read, interpret, and create bar graphs, circle graphs, and line graphs.

77-854-707 Financial Literacy 1 Credit
Students will explore types of credit cards, loans to avoid, monthly budgeting, checkbook register entry, and monthly reconciliation and amortization table loan scenarios in order to make wise money decisions.

77-854-790 Math Review: Nursing Skills 3 Credits
Students taking this course compute with rational numbers; fractions, decimals, and percents. Students use their computational skills with rational numbers to solve application problems. Students will use knowledge of mathematical notation and the orders of operation and calculator usage skills to evaluate expressions. Students will then use the notation and calculator usage skills to solve problems requiring the use of formulas or proportions. These foundation skills will prepare students for measurement and drug calculation problems found in Nursing Skills and subsequent courses in the nursing program.

77-854-791 Math Review: Advanced Nursing Skills 3 Credits
Students will review the skills needed to use dimensional analysis to solve a variety of both general and healthcare-related problems. Students will convert measurements in both the metric and English systems. Students will solve problems involving basic and multi-dimensional measurements. Students will solve basic drug dosage problems. Students will also setup and compute application problems on concentration, dilutions, and administration rates.

77-854-792 Math Review: PTA Kinesiology 3 Credits
Students taking this course compute with rational numbers; fractions, decimals, and percents. Students use their computational skills with rational numbers to solve application problems. Students will use knowledge of mathematical notation and the orders of operation and calculator usage skills to evaluate expressions. Students will then use the notation and calculator usage skills to solve problems requiring the use of formulas or proportions. These skills will provide a foundation that will prepare students for the math-related concepts found in Kinesiology and other courses in the PTA program.

77-854-793 Math Calculations for Health Occupations 3 Credits
Students will review and use the metric place-value chart to solve problems. Students apply the fundamentals of dimensional analysis to solve measurement conversion problems commonly encountered in nursing. Students will apply dimensional analysis computational skills to solve entry-level drug calculation problems (tablets, capsules, or volume), IV flow rate problems (both pump and drip infusion), and IV-related problems (duration of infusion or diluent requirements).

77-854-799 Math Review 3 Credits
Students taking this course compute with rational numbers; fractions, decimals, and percents. Students use their computational skills with rational numbers to solve application problems. Student will use knowledge of mathematical notation and the orders of operation and calculator usage skills to evaluate expressions. Students will then use the notation and calculator usage skills to solve problems requiring the use of formulas or proportions.

78-851-798 Communication Review 1 Credit
Develops writing skills through assignments that cover standard English practices and organization of an essay. Writing assignments are designed to help the learner grasp fundamental rules of English grammar and organize ideas. This course develops a student's ability to structure their thoughts in sentences, paragraphs, and essays.

78-851-799 Communication Review: Walk-In 3 Credits
Students develop and improve communication skills in the areas of listening, speaking, reading, and writing. Learners discuss course assignments and concepts, practice specific study skills that relate to their program courses, and complete activities that may include computer generated exercises, analysis of test materials, preparation of speeches or written documentation, and study of grammar and punctuation.

78-854-799 Math Review: Walk-In 3 Credits
Students review whole number operations, fractions, decimals, percents, algebra, geometry, and trigonometry. The scope of the course is dependent on the student's ability and career objective. All concepts are reinforced through application problems specific to the student's career goal.



Southwest Wisconsin
TECHNICAL COLLEGE

1800 Bronson Boulevard, Fennimore, WI 53809

www.swtc.edu

800.362.3322