

# Quo Vadis, Micro-Credentials? An Empirical Analysis of Micro-Credentials in US Higher Education

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## Abstract

Micro-credentials have received renewed attention by universities as a potential pathway to high-demand careers. The goals of this study were to understand the prevalence of micro-credentials offered by universities, the characteristics of universities offering micro-credentials generally and information systems (IS) micro-credentials specifically, and the content of IS micro-credentials. To this end, this study found that only very few universities are currently offering micro-credentials. Specifically, of all 1,860 universities listed on US News & World Report, only 127 (6.8%) offer micro-credentials on Credly, which is one of the largest digital credentialing platforms. However, once universities offer micro-credentials, they do so prolifically. In fact, the 127 universities offer a total of 2,308 micro-credentials, with 114 (89.9%) universities offering more than one micro-credential for an average of 53 micro-credentials offered per university. Moreover, this study found that universities offering micro-credentials or IS micro-credentials are more likely to be tier 1, public universities located in a city, urban, or suburban setting with a higher starting salary of graduates. Lastly, of the 2,308 micro-credentials offered by universities, only 195 (8.4%) are IS micro-credentials addressing competency realms defined in the IS2020 curriculum. The top IS2020 competency realms are technology, data, and development. The most frequently associated skills among IS micro-credentials are cybersecurity, Excel, AI/ML, SQL and HTML, CSS, JS. Future research is needed to understand the longitudinal development of micro-credential offerings among universities (including international universities), on various digital credentialing platforms, possibly leveraging automatic data collection and analysis methods.

**Keywords:** micro-credentials, digital badges, IS2020

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