

# METHODOLOGY NOTE: CYBER DEGREE PROGRAMS

## BACKGROUND

The San Diego Regional Economic Development Corporation (EDC) uses a third-party data provider, Emsi, to source and analyze certain series related to our reports. Emsi curates data relating to occupational employment, but as an extension of that data, also links occupations to job postings and college degree programs, among other things.

For the purpose of the 2021 AI in Cyber report, we used Emsi data to provide an estimate of the number of degree programs and completions associated with Cyber occupations. That exercise yielded a total of **22,273 completions across 118 degree programs** at San Diego colleges and universities that supply Cyber occupations with talent.

## WHAT CHANGED

Readers of previous Cyber reports may recall that, in the 2019 Cyber economic impact study, there were just over 3,000 degree completions across 32 academic programs. This is due to a methodology change by Emsi, following a review of the links between Cyber occupations and the respective degree programs that feed the talent pipeline for those.

In addition to Emsi's online tools, the company employs a consulting team that works with hundreds of colleges and universities to develop and align their programs with their state and local economies. With that collaboration, Emsi further refined the relevance and alignment of their traditional Classification of Instructional Programs (CIP) to Standard Occupational Classification (SOC) mapping. In some instances, there are fewer occupations mapped to academic programs in order to focus on the occupations being trained for and avoiding ones that may not have been relevant to the skills and training that students are prepared with. In other cases, occupations have been added to show the true demand for those students based on the skills they've gained. This updated mapping, in their view, better aligns programs with the true workforce demand.

If the mapping had not been changed, then the **number of completions for Cyber occupations would have totaled 2,996**—essentially the same as in the 2019 report—**across 40 programs**.

### About San Diego Regional EDC

EDC is an independently-funded economic development organization that mobilizes business, government, and civic leaders around an inclusive economic development strategy in order to connect data to decision making, maximize regional prosperity, enhance global competitiveness, and position San Diego effectively for investment and talent.