

July 30, 2024

SEVP Response Center
U.S. Immigration and Customs Enforcement
Department of Homeland Security
Washington, D.C. 20536

Via email: <u>SEVP@ice.dhs.gov</u>

**Re: Attention: STEM CIP Code Nomination** 

To Whom It May Concern:

The American Institute of Certified Public Accountants (AICPA) and the undersigned organizations are pleased to submit this nomination for the Accounting CIP Code (52.0301) to be added to the Department of Homeland Security (DHS) STEM Designated Degree Program List.

Accounting is, at its core, a STEM profession that harnesses information technology, data analytics and technological innovation for financial performance measurement, reporting, and optimization. The accounting profession has always incorporated STEM skills into its education, training and practice. But the financial system's rapid technological and data transformation in recent decades has demanded the profession embrace a seismic shift in the skills and knowledge professional accountants need in order to serve their clients. Along with traditional accounting skills in database management, statistics, mathematics, and risk assessment, today's accountants must also be proficient with new and emerging technologies like artificial intelligence, machine learning, data analytics, cryptocurrency, and blockchain.

Furthermore, the changes in the financial system require that accountants not simply understand technological innovations, but drive such innovation forward. At the university level, degree-granting accounting programs publish original research and lead innovation initiatives that engage students in solving real-world problems, which provides tangible, ongoing benefits to the U.S. and global financial systems. This culture of innovation carries through to the accounting sector itself, where accounting firms and professionals have developed patented technologies, including software apps or other analytical tools that allow accountants to better and more quickly perform risk assessments.

In short, accounting is increasingly and inexorably rooted in the STEM ecosystem. As members of a discipline that spearheads research, innovation, and the development of new technologies using mathematics, computer science and other STEM topics, accounting programs classified under 52.0301 have demonstrated they belong on the Department's STEM Designated Degree Program List.

As described in more detail in the attached white paper, *Accounting and STEM*, there is significant evidence that accounting is a STEM field:

• Degree-granting accounting education programs require proficiency in STEM. As the financial ecosystem has become deeply integrated with technological advances, accounting schools have responded by updating the competencies and skills accounting students learn.

STEM instruction is not optional, but necessary for degree-granting accounting programs to maintain their accreditation. Furthermore, accreditation standards demand that an accredited accounting program "produces high-quality intellectual contributions that are consistent with its mission, expected outcomes, and strategies and that impact the theory, practice, and teaching of accounting, business, and management."

A 2024 AICPA survey of U.S. accounting schools found that:

- U.S. accounting programs require at least one course in at least 12 topics widely considered to be STEM.
- The vast majority of accounting programs require coursework in STEM topics.
- The majority of required courses at most accounting programs contain STEM content.
- The STEM content of accounting education programs equals or exceeds that of some related programs on the STEM Designated Degree Program List. The AICPA survey found that accounting programs classified under 52.0301 require students to take, on average, at least one course that covers topics that are included on the Designated Degree Program List, including Information Technology (CIP Code 11.0103), Computer and Information Systems Security (11.1003), Data Analytics (30.7101), Statistics (27.0501), and others.

In addition, the study found that accounting programs classified under 52.0301 include as much, if not more, required STEM content than programs classified under CIP codes already included on the Designated Degree Program List.

• STEM proficiency is a prerequisite for accounting professional licensure. Accounting graduates who sit for the Uniform CPA Examination must demonstrate facility with multiple STEM disciplines in order to earn their licenses in every U.S. state and territory. Data and technology concepts are woven throughout all sections of the Exam, which covers aspects of IT infrastructure, from platforms and services, to security, confidentiality, and privacy, as well as the foundational skills needed to build and develop technology.

The predominance of STEM knowledge to licensure is further reflected in the CPA Evolution Model Curriculum, which AICPA and the National Association of State Boards of Accountancy (NASBA) have launched to help accounting students prepare for licensure. The Model Curriculum includes multiple modules and topics that cover STEM content, including financial data analytics and information technology.

• STEM-related research, innovation and technology development are central to accounting education, training and practice. As the financial system has embraced new technologies, the accounting profession has moved to ensure its current and future practitioners are well-positioned to handle and analyze data in more sophisticated ways. At the university level, accounting faculty and students have published research on blockchain, audit efficacy and data security – programs where students use analytical tools to solve case problems, including regression analysis, data analysis techniques, visualization tools, and new technologies.

In addition, accounting professionals are developing software that facilitates financial analytics, financial data processing, knowledge management, data visualization, effective decision communication, statistical inference, and dynamic modeling of financial data. Many public accounting firms have developed patented technologies, including software apps or other analytical tools that allow accountants to better and more quickly perform risk assessments. These advancements rely on an accounting education system that places STEM learning at the forefront.

By including accounting on the Designated Degree Program List, the Department will do more than recognize the ample evidence that accounting is a STEM profession; this decision has real-world implications for the nation's economic security and competitive position in the global marketplace.

Considerable data shows that the United States is facing a shortage of qualified accountants at a time when the demand for qualified accounting services is on the rise. According to a 2023 survey of more than 2,000 hiring managers by Robert Half, nearly two-thirds of companies reported planning to hire permanent employees in finance and accounting, and 78 percent of companies reported planning to hire finance and accounting contract workers, more than for virtually any other role.

However, the supply is not keeping up with demand. According to some surveys, 87 percent of businesses say they find it increasingly hard to recruit the accountants they need, while eight in 10 CFOs have reported a talent shortage in accounting roles.

This gap between supply and demand poses substantial threats to the country's economic system. It impacts the ability of publicly traded companies to make accurate financial reports; of shareholders to understand the economic condition of companies in which they invest; of government agencies to find and stop fraud; and of the American business sector to compete in an increasingly competitive and technology-driven global marketplace. As technologies like cryptocurrencies and blockchain become more widespread and use of and dependence on artificial intelligence in the financial community grow, the need for accounting professionals who can produce accurate and timely financial reports will only accelerate.

Adding accounting to the Designated Degree Program List will enable U.S. accounting programs to attract talent from around the world and let accounting graduates to use their skills to support

Accounting CIP Code STEM nomination July 30, 2024 Page 4

U.S. companies and the nation's economy for a longer period of time. For these reasons, AICPA and the undersigned organizations urge the Department to include CIP Code 52.0301 on its STEM Designated Degree Program List.

If you have any questions, please do not hesitate to contact Todd Sloves, Director, Congressional and Political Affairs, at <u>Todd.Sloves@aicpa-cima.com</u> or 202.434.9269, or Jan Taylor, Academic in Residence and Senior Director, Academic and Student Engagement, at <u>Jan.Taylor@aicpa-cima.com</u> or 832.904.1194.

Sincerely,

Barry C. Melancon, CPA, CGMA

CEO, American Institute of CPAs

Susan S. Coffey, CPA, CGMA

Chief Executive Officer – Public Accounting

## Additional Organizations Expressing Support of this Submission:

Alabama Society of CPAs Alaska Society of CPAs

American Accounting Association

Arizona Society of CPAs Arkansas Society of CPAs

Association to Advance Collegiate Schools

of Business (AACSB International)

California Society of CPAs Center for Audit Quality Colorado Society of CPAs Connecticut Society of CPAs Delaware Society of CPAs

Greater Washington Society of CPAs

Florida Institute of CPAs
The Georgia Society of CPAs
Guam Society of CPAs
Hawaii Society of CPAs
Idaho Society of CPAs
Illinois CPA Society
Indiana CPA Society

International Accreditation Council for

Business Education Iowa Society of CPAs Kansas Society of CPAs Kentucky Society of CPAs Society of Louisiana CPAs Maine Society of CPAs

Maryland Association of CPAs

Massachusetts Society of CPAs Michigan Association of CPAs Minnesota Society of CPAs Mississippi Society of CPAs Missouri Society of CPAs Montana Society of CPAs

**NAF** 

National Association of State Boards of

Accountancy

National Society of Black Certified Public

Accountants

Nebraska Society of CPAs Nevada Society of CPAs

New Hampshire Society of CPAs New Jersey Society of CPAs New Mexico Society of CPAs New York State Society of CPAs North Carolina Association of CPAs

North Dakota CPA Society The Ohio Society of CPAs Oklahoma Society of CPAs Oregon Society of CPAs Pennsylvania Institute of CPAs

The PhD Project

Puerto Rico Society of CPAs Rhode Island Society of CPAs South Carolina Association of CPAs

South Dakota CPA Society

Accounting CIP Code STEM nomination July 30, 2024 Page 5

Tennessee Society of CPAs Texas Society of CPAs Utah Association of CPAs Vermont Society of CPAs Virgin Islands Society of CPAs Virginia Society of CPAs Washington Society of CPAs West Virginia Society of CPAs Wisconsin Institute of CPAs Wyoming Society of CPAs

## Attached:

CIP Code Nomination Form

Accounting As STEM white paper

Letter of support from university accounting degree programs