**CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA**
**ACADEMIC SENATE**

# ACADEMIC PROGRAMS COMMITTEE
# REPORT TO
# THE ACADEMIC SENATE

## AP-003-267

### New Self-Support Master of Science in Artificial Intelligence in Engineering

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| Academic Programs Committee | Date: 08/26/2026 |
| Executive Committee — Received and Forwarded | Date: 10/21/2026 |
| Academic Senate | Date: 11/04/2026 |
| | First Reading |

## BACKGROUND:

This referral proposes a new 30-unit, self-support Master of Science in Artificial Intelligence in Engineering, (AIE) administered by the Industrial and Manufacturing Engineering Department in collaboration with the College of Professional and Global Education, with anticipated implementation in Fall 2028. The hybrid program is designed for working professionals and graduates seeking advanced skills in AI-enabled engineering, including robotics, intelligent systems, advanced manufacturing, and smart infrastructure. Its curriculum emphasizes ethical AI, applied problem-solving, and a culminating master's project.

The CSU proposal identifies related graduate offerings at San José State University (M.S. in Artificial Intelligence), San Diego State University (M.S. in Artificial Intelligence and Technology), CSU East Bay (AI-related study within its M.S. in Computer Science), and San Francisco State University (data science and AI offerings). It also cites USC's M.S. in Computer Science (Artificial Intelligence), UCLA's AI-focused Master of Engineering, and UC San Diego's graduate study in intelligent systems, robotics, and control. CPP's proposed degree is differentiated by its focus on AI applications in physical engineering systems.

## RESOURCES CONSULTED:

College Deans;

Department chairs of IME, CS, CIS and ECE departments.

## SUMMARY OF STRENGTHS:

- **Interdisciplinary expertise.** Faculty participation spans Industrial and Manufacturing Engineering; Computer Science; Electrical and Computer Engineering; Electromechanical Engineering Technology; Aerospace Engineering; Mechanical Engineering; Civil Engineering; Chemical and Materials Engineering; and Philosophy, bringing together computing, engineering, and responsible-AI expertise.
- **Workforce alignment.** The curriculum combines machine learning, deep learning, data engineering, and AI applications in engineering, with project-based learning addressing industry needs.
- **Self-support model.** Hybrid delivery is intended to serve working professionals and permit specialized faculty participation through compensated assignments outside regular state-supported teaching commitments.

**DISCUSSION:**

The Committee found a strong rationale for the program and its interdisciplinary design. During consultation, Computer Science raised concerns about overlap with existing graduate courses in Advanced Machine Learning, Computer Vision, and Natural Language Processing. As subsequently clarified to the Committee, the concern was resolved by cross listing the three relevant AIE courses with existing CS courses, increasing collaboration with the Computer Science Department and opportunities for CS faculty participation.

All AIE courses (currently using SE-prefix) other than the three cross-listed CS courses are to be newly developed; the SE-prefix courses and the new prefix of AIE is currently under consideration by the University Curriculum Committee (UCC) and OAP will facilitate the prefix transfer of the new courses in due course. The Committee also reviewed the original stackable certificate concept. Certificate language was removed per OAP advice because certificates require separate proposals and need to be compliant with the new Academic Certificate Policy. Certificates may be considered after the degree program is established.

**RECOMMENDATION:**

The Academic Programs Committee recommends approval of the new Self-Support Master of Science in Artificial Intelligence in Engineering (AIE).