



## **Strengthening the Technical Workforce Pipeline at Community Colleges**

Thanks to a \$90,000 grant from the United Engineering Foundation (UEF), ASME led a collaborative effort among professional engineering societies (PES), community colleges, industry partners, and workforce organizations to strengthen the technical talent pipeline at two-year institutions. Building on the work initiated in 2022, the project refreshed national data on community college engagement, convened 35 stakeholders to examine current practices, and created a digital engagement toolkit to guide future collaboration. The long-term goal is to expand equitable pathways into engineering and technical careers by increasing the presence and coordinated efforts of professional societies on community college campuses.

### **Scope of Work**

The first phase of the project focused on collecting updated information on community college engagement activities of five professional engineering societies:

The professional engineering societies that agreed to participate in the project were:

- Accreditation Board for Engineering and Technology (ABET)
- American Institute of Chemical Engineers (AIChE)
- American Society of Civil Engineers (ASCE)
- American Society of Mechanical Engineers (ASME)
- Institute of Electrical and Electronics Engineers (IEEE)
- Society of Naval Architects and Maritime Engineers (SNAME)

Societies completed an online questionnaire and participated in 30-minute follow-up calls to refine or clarify data. Information from ASME's 2022 collaboration served as a baseline. The compiled results captured purpose statements, delivery models, funding sources, benefits, challenges, and opportunities for engagement.

### **Phase 2**

The second phase of the project consisted of hosting a convening to gather a diverse cohort of stakeholders representing the PES, employers, community colleges and non-government organizations to review the progress made since the 2022 convening, gain an understanding of current community college and industry needs, discuss promising practices for engagement, co-create the foundational elements of a shared engagement toolkit, and identify steps for the continued development of this shared work.

## **Outcomes & Recommendations**

Stakeholders identified multiple areas such as offering workshops, instructional resources, and workbased learning opportunities where societies and partners could support students, faculty, and institutions, either independently or jointly.

One of the signature outputs of the project was the creation of a digital engagement toolkit designed for professional societies, industry partners, and community colleges. The toolkit includes a stakeholder map, statistics, promising practices, case studies, and curated resources. Stakeholders emphasized that the toolkit must be easy to use and intuitive for it to be usable. ASME will update the toolkit every six months to ensure relevance and accuracy.

## **Next Steps**

Stakeholders identified several ongoing actions to maintain momentum and expand collaboration:

- ASME shared the participant contact list to support continued networking.
- A new Community of Practice (CoP) has been established, meeting monthly; 75% of convening participants currently attend.
- The engagement toolkit will continue to be refined and expanded.
- Partners will explore opportunities to scale engagement activities across regions and disciplines.
- ASME, ASCE, and AiChE are collaborating to offer workshops and share responsibilities for the new Community of Practice.

Together, these efforts aim to strengthen the national engineering and technical workforce pipeline by elevating the role of community colleges and expanding professional society involvement in student success, faculty support, and industry collaboration.