## ABET Update

Continuous Improvement Committee
Jason Isaacs and Vida Vakilian

#### Update

- We have decided to pursue ABET Accreditation for Mechatronics Engineering Program first.
- We recently had an assessment workshop attended by all faculty who are currently teaching EMEC courses.
- We have support of the administration.
  - Funding for workshop
  - Funding for consultant
  - Administrative help with preparing self assessment documents
- We have completed a Continuous Improvement and Program Educational Objectives Review Plan.
- Timeline
- Program Educational Objectives

# Continuous Improvement and Program Educational Objectives Review Plan

Fall Semester		
Deadline	Responsible Party	Activity
Prior to first	CIC	Remind instructors to Review Pro-
day of classes		gram Improvement Plan
First Month of	CIC	Submit Annual Program Improve-
Classes		ment Report to Dean
Midterm	Department Faculty	Faculty meets to review Annual Pro-
		gram Improvement Report and plan
		actions to improve the program
Midterm	CIC and Instructors	Hold Assessment Workshop to De-
	for courses in which	velop / Refine Rubrics
	SLOs are assessed	
Deadline for	Instructors for courses	Submit to the CIC an Outcome As-
$\operatorname{submitting}$	in which SLOs are	sessment Record Sheet for each SLO
course grades	assessed	assessed

# Continuous Improvement and Program Educational Objectives Review Plan

Spring Semester		
Deadline	Responsible Party	Activity
Thursday prior	CIC	Remind instructors to Review Pro-
to first day of		gram Improvement Plan
classes		
Graduating	Instructors for EMEC	Distribute Graduating Senior Survey
Senior Survey	499	and Collect Results.
$\operatorname{deadline}$		
Midterm	CIC and Instructors	Hold Assessment Workshop to De-
	for courses in which	velop / Refine Rubrics
	SLOs are assessed	
Deadline for	Instructors for courses	Submit to the CIC an Outcome As-
$\operatorname{submitting}$	in which SLOs are	sessment Record Sheet for each SLO
course grades	assessed	assessed

#### ABET Timeline

- October 1, 2023: Submit Readiness Review Document
- January 31, 2024: Submit Request for Evaluation
- July 1, 2024: Submit Self-Study Report
- September 2024 December 2024: On-site Visit
- November 2024 March 2025: Receive Draft Statement (2-3 Months after visit)
- December 2024 April 2025: 30-Day Due Process to take action to resolve identified shortcomings
- July 2025: Commission Decision-Making Meeting
- August 1, 2025: Final Statement Sent to Institution

### Program Educational Objectives (PEOs)

- The Program Educational Objectives represent goals for Mechatronics Engineering graduates to achieve within five years of graduation.
- The PEOs are reviewed periodically and updated as necessary.
- One way that you are part of the process is through the regular review and feedback on the PEOs.

# Process for Review and Update of Program Educational Objectives (PEOs)

- The PEOs will be reviewed every year with various program constituencies.
- Program constituencies including program faculty, alumni, and employers of program graduates will be consulted for input and data collection.
- The current PEOs are presented at the IAB meeting in December in order to solicit feedback.
- The feedback is reviewed by faculty in department meeting during the Spring semester and if revisions are approved by the faculty the newly revised PEOs will be presented at the IAB meeting in May.
- If a need arises for review outside of the normal cycle it can be done through survey, email, phone, or video call.
- Alumni surveys will be administered starting in 2025, three years after the first graduating class.

### PEOs – Mechatronics Engineering (Old)

In accordance with the mission of the California State University Channel Islands, alumni of the mechatronics engineering program will be prepared for the following achievements within five years of graduation:

- 1. Exceed the expectations of their employers as professional engineers.
- 2. Excel in pursuit of graduate level degree programs or professional certifications.
- 3. Apply a foundation of engineering problem solving and fact-based decision making in their professional endeavors.
- 4. Approach complex engineering problems facing the world from multiple perspectives including cross-disciplinary, cross-cultural, and international.
- 5. Recognize their role in serving local and professional communities.
- 6. Demonstrate leadership, communication skills, and an understanding of ethical and societal implications of their decisions and engineering designs.

### PEOs – Mechatronics Engineering (Revisions)

In accordance with the mission of the California State University Channel Islands, alumni of the mechatronics engineering program will be prepared for the following achievements within five years of graduation:

- 1. Exceed the expectations of their employers as professional engineers.
- 2. Excel in pursuit of graduate level degree programs or professional certifications.
- 3. Apply a foundation of engineering problem solving and fact-based decision making in their professional endeavors.
- 4. Approach complex engineering problems facing the world from multiple perspectives including cross-disciplinary, cross-cultural, and international.
- 5. Recognize their role in serving local and professional communities.
- 6. Demonstrate leadership, communication skills, and an understanding of ethical and societal implications of their decisions and engineering designs.

### PEOs – Mechatronics Engineering (New)

In accordance with the mission of the California State University Channel Islands, alumni of the mechatronics engineering program will be prepared for the following achievements within five years of graduation:

- 1. Exceed the expectations of their employers as professional engineers in a variety of application areas.
- 2. Engage in life-long learning through the pursuit of graduate-level degree programs, professional certifications, or other forms of professional development.
- 3. Approach complex engineering problems facing the world from multiple perspectives, including cross-disciplinary, cross-cultural, and inter- national.
- 4. Actively serve local and professional communities through technical and leadership skills influenced by the ethical and societal implications of their decisions.

#### PEOs Computer Science

#### PEO 1: Depth and breadth

Computer Science graduates will have a strong understanding of the field of computer science including scientific principles, analysis techniques, design methodologies, several programming languages and an understanding of systems in order to:

- Be successfully employed
- Pursue a graduate degree or professional certification

#### PEO 2: Human formation

Computer Science graduates will have a human formation enabling them to:

- Demonstrate leadership, e.g., take a leadership role in a team
- Growth: being promoted or moving up to a better job
- Possess an understanding of the broader impacts of technology by identifying ethical, economic, cultural, legal or environmental issues related to work projects.

#### PEO3: Professionalism

Computer Science graduates will be prepared for modern work environments, where they will:

- Apply their skills in clear communication, responsible teamwork, and time management by, for example, managing a team or project, working on multidisciplinary project teams, or communicating with external stakeholders.
- Demonstrate professional attitudes and ethics by, for example, assisting colleagues in professional development (e.g. mentoring), engaging in continuing education or training, participating in professional societies, engaging in service to the community, or contributing to an employer's efforts to comply with software licensing or compliance, protect privacy, or assure quality and safety.

#### PEOs Information Technology

The Information Technology program at CSU Channel Islands will prepare its students:

- PEO 1: To be successfully employed in the field of information technology and / or related interdisciplinary fields.
- PEO 2: To demonstrate leadership and growth within the IT field that reflects collaborative, communicative decision-making and considers ethical, socioeconomic, legal and environmental ramifications.
- PEO 3: To continue lifelong professional development through the pursuit of graduate study or professional certifications that contribute to individual and societal growth.