

<b>Program Learning Outcomes</b>  <b>Institutional Learning Outcomes</b>	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11
	Ability to apply knowledge of mathematics, science, and engineering.	Ability to design and conduct experiments, as well as to analyze and interpret data.	Ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.	Ability to function on multidisciplinary teams.	Ability to identify, formulate and solve engineering problems.	Understanding of professional and ethical responsibility.	Ability to communicate effectively.	Broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	Recognition of the need for, and an ability to engage in, life-long learning.	Knowledge of contemporary issues.	Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
Thinking and Reasoning: think critically and creatively and apply analytical and quantitative reasoning to address complex challenges and everyday problems.	X	X	X		X						X
Communication: communicate ideas, perspectives, and values clearly and persuasively while listening openly to others.				X			X				
Diversity: apply knowledge of diversity and multicultural competencies to promote equity and social justice in our communities.			X			X		X		X	
Collaboration: work collaboratively and respectfully as members and leaders of diverse teams and communities.				X							
Sustainability: act responsibly and sustainably at local, national, and global levels.						X		X		X	
Graduates of CSUEB will demonstrate expertise and integration of ideas, methods, theory and practice in a specialized discipline of study			X								X