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| logo_1.jpg College of Science (CSCI) MAJOR: (Industrial Engineering, B.S.)  CSCI EETF (Educational Effectiveness Task Force) |

**PROGRAM STUDENT LEARNING OUTCOMES**

 2014

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| Students graduating with a B.S. Industrial Engineering degree from Cal State East Bay will be able to: | I.L.O Alignment |
| a |  Ability to apply knowledge of mathematics, science, and engineering. | 1 |
| b |  Ability to design and conduct experiments, as well as to analyze and interpret data. | 1 |
| c |  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. | 1, 3, 6 |
| d |  Ability to function on multidisciplinary teams. | 2, 4 |
| e |  Ability to identify, formulate and solve engineering problems. | 1 |
| f |  Understanding of professional and ethical responsibility. | 3, 5 |
| g |  Ability to communicate effectively. | 2 |
| h |  Broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context. | 3, 5 |
| i |  Recognition of the need for, and an ability to engage in, life-long learning. |  |
| j |  Knowledge of contemporary issues. | 3, 5 |
| k |  Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice. | 1, 6 |

**1. Graduates of CSUEB will be able to think critically and creatively and apply analytical and quantitative reasoning to address complex challenges and everyday problems**

**2. Graduates of CSUEB will be able to communicate ideas, perspectives, and values clearly and persuasively while listening openly to others**

**3. Graduates of CSUEB will be able to apply knowledge of diversity and multicultural competencies to promote equity and social justice in our communities**

**4. Graduates of CSUEB will be able to work collaboratively and respectfully as members and leaders of diverse teams and communities**

**5. Graduates of CSUEB will be able to act responsibly and sustainably at local, national, and global levels**

**6. Graduates of CSUEB will demonstrate expertise and integration of ideas, methods, theory and practice in a specialized discipline of study**