

Table 4. Mapping of general education outcomes to the student learning outcomes and assessment methods of major courses in the B.S. in Civil Engineering Program.

<b>General Education Outcomes (CPP GE)</b>	<b>Course</b>	<b>Appropriate Student Learning Outcomes</b>	<b>Assessment Method</b>
<i>1a. Write Effectively</i>	CE 2001	1. Analyze audience for a given technical topic and identify an effective communication mode	Report
	CE 1011L	3. Understand different methods of measuring surveying distance and its applications	Report
	CE 2030L	8. Produce final written project report summarizing material recommendations	Report
	EGR 4810 EGR 4820 EGR 4830	1. Identify a problem requiring a technological solution, describe the problem and its background objectively and technically.	Final Report
<i>1c. Find, evaluate, use and share information effectively and ethically</i>	CE 1001L	7. interpret appropriate design standards and guidelines applied to engineered infrastructure	Homework
	CE 2001	2. Analyze a written or oral presentation of a technical topic for effectiveness of its message.	Homework
	EGR 4810 EGR 4820 EGR 4830	2. Integrate knowledge and bring it to bear to solve a meaningful technologically challenging problem, consistent with the considerations and restraints dictated by human welfare and advancement.	Report
	CE 2061	7. Select an appropriate pump based upon system hydraulics analysis and interpretation of manufacturers' data.	Project
<i>1d. Construct arguments based on sound evidence and reasoning to support an opinion or conclusion</i>	EGR 4810 EGR 4820 EGR 4830	8. Analyze data and reason scientifically to formulate a conclusion.	Project
	CE 3401L	3. Prepare a complete geotechnical report including geologic background, site conditions, subsurface conditions and recommendation for design. 5. Present your findings in a professional oral presentation.	Homework
<i>4b. Demonstrate activities, techniques or behaviors that promote intellectual or cultural growth</i>	CE 3201L	3. Interpret fundamentals of sustainability and its implications in engineering career. 5. Describe water crisis and available solutions.	Homework

	CE 4321L	<p>2. Interpret legal descriptions.</p> <p>3. Resolve conflicting elements in legal descriptions.</p> <p>6. Engineering and land surveying aspects of subdivision projects.</p> <p>11. An understanding of laws, regulations, and codes relating to land development including the California Environmental Quality Act, the Subdivision Map Act, the Uniform Building Code, local subdivision and grading codes, and the Professional Engineer's and Land Surveyor's Acts.</p>	Homework
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