# Alignment Matrix – Relationships between Civil Engineering Curriculum and Student Learning Outcomes (SLO's)

| | SLO/Required Courses/experiences | Selected CE Program SLO's | | | | | University SLO's | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Understanding of mathematics, science and engineering principles (Expected Outcome 1.1) | Understanding of business, economics, project management, and other issues (Expected Outcome 2.3) | Ability to create and deliver quality oral presentations (Expected Outcome 3.4) | Understanding of professional and ethical responsibilities (Expected Outcome 4.1) | Lifelong learning & continuing education (Expected Outcome 4.2) | Disciplinary & broad "general education" knowledge | Critical thinking/problem-solving/information literacy | Written communication | Understanding & skills for diverse social world | Ethical standards of discipline |
| **No.** | **Course Name** | | | | | | | | | | |
| | Civil Engg Electives | A | X | X | | | A | X | X | | X |
| | Humanities & Soc Sci Elect | | A | | | X | A | | X | | X |
| | Option Electives | X | X | X | | | X | X | X | | X |
| CE 015 | Engineering Assembly | | | | X | X | X | | | X | X |
| CE 101 | Intro to CE | | | | X | | X | | | X | X |
| CE 212 | Elem Surveying Engineering | X | | | X | X | X | X | | X | X |
| CE 333 | Statics | X | | | | | X | X | | | |
| CE 411 | Route Location | X | | X | | | X | X | X | | |
| CE 522 | Soil Mechanics I | X | | | | | X | X | | | |
| CE 528 | Foundations | A | | X | X | | A | A | X | X | X |
| CE 530 | Statics & Dynamics | X | | | | | X | X | | | |
| CE 533 | Mechanics of Materials | X | | | | | X | X | | | |
| CE 534 | Mechanics of Materials Lab | X | | | | | X | X | | | |
| CE 537 | Intro to Structural Analysis | X | | | | | X | X | | | |
| CE 542 | Structural Engg. (Steel) | A | | X | | X | A | A | X | | X |
| CE 544 | Structural Engg. (Concrete) | A | | | | X | A | A | | | X |
| CE 550 | Water Res. Engr. | A | | X | X | X | X | X | X | X | X |
| CE 552 | Hydraulic Engg. | A | | | | X | X | A | | | X |
| CE 563 | Envir Engg Fundamentals | X | | | | | X | X | | | |
| CE 565 | Water/Wastewater | A | | X | | | X | A | X | | |
| CE 572 | Highway Engg. | A | | X | | | A | A | X | | |
| CE 585 | Civil Engineering Project | A | A | A | A | A | A | A | A | A | A |

X – Courses or experiences in which students have the opportunity to learn the outcome.

A – Courses or experiences in which student performance is used for program level assessment of the outcome.