Bachelor of Science in Architectural Engineering  
Department of Civil Engineering and Engineering Mechanics

Mapping of Courses and Activities to Program Outcomes

| DESIRED STUDENT OUTCOME                                                                 | ARCE 210 | ARCE 223 | ARCE 225 | ARCE 235 | ARCE 240 | ARCE 330 | ARCE 333 | ARCE 334 | ARCE 335 | ARCE 338 | ARCE 398 | ARCE 400A | ARCE 408A | ARCE 408B | ARCE 438 | CEE 240A | CEE 242 | CEE 483 | SE 301 |
|----------------------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|----------|---------|-------|-------|
| 1) an ability to identify, formulate, and solve complex engineering problems by        | I        | I        | A        | P        | A        | A        | A        | A        | A        | P        | A        | A         | A         | A         | A        | A       |       |       |
| applying principles of engineering, science, and mathematics                           |          |          |          |          |          |          |          |          |          |          |          | A         | P         | A         |          |         |       |       |
| 2) an ability to apply engineering design to produce solutions that meet                | I        | P        | P        | I        | A        | P        | I        | P        | A        | I        | P        | P         | A         | A         | A        | A       |       |       |
| specified needs with consideration of public health, safety, welfare, as well as      |          |          |          |          |          |          |          |          |          |          |          |          | A         | P         | A         |          |         |       |       |
| global, cultural, social, environmental, and economic factors                        |          |          |          |          |          |          |          |          |          |          |          |          | A         | P         | A         |          |         |       |       |
| 3) an ability to communicate effectively with a range of audiences                    | P        | *        | P        | P        | I        | I        | A        | P        | A        | P        | P        | A         | P         | P         | I        | A       |       |       |
| 4) an ability to recognize ethical and professional responsibilities in engineering  | P        | *        | P        | P        | I        | I        | A        | P        | I        | P        | I        | A         | A         | I         | P        | A       |       |       |
| situations and make informed judgements, which must consider the impact of          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |         |       |       |       |
| engineering solutions in global, economic, environmental, and societal contexts      |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |         |       |       |       |
| 5) an ability to function effectively on a team whose members together                 | P        | *        | P        | I        | I        | P        | A        | P        | I        | P        | P        | A         | I         | P         | A       | P       |       |       |       |
| provide leadership, create a collaborative and inclusive environment, establish       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |         |       |       |       |
| goals, plan tasks, and meet objectives                                               |          |          |          |          |          |          |          |          |          |          |          |          | A         | P         | P         | I        | I       | A     |       |
| 6) an ability to develop and conduct appropriate experimentation, analyze and         | *        | P        | P        | P        | I        | I        | A        | P        | P        | I        | I        | A         | P         | P         | I        | A       |       |       |       |
| interpret data, and use engineering judgement to draw conclusions                    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |         |       |       |       |
| 7) an ability to acquire and apply new knowledge as needed, using appropriate        | P        | *        | P        | P        | P        | I        | I        | P        | P        | I        | P        | A         | I         | P         | A       | A       |       |       |       |
| learning strategies                                                                  |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |         |       |       |       |