College of Engineering Proposed Catalog Changes Effective Summer 2020

1. Change the following courses:

CE 215 Civil Engineering Analysis and Design

3 credits

Application of basic science, mathematics, and fundamental engineering principles to solution of civil engineering design problems; use of structured programming concepts in design; develop oral and written communication skills.

Prereq: CE 115, ENGR 105, and MATH 170. A minimum grade of 'C' or better is required for all pre/coreqs.

Coreq: PHYS 211/PHYS 211L. STAT 301. A minimum grade of 'C' or better is required for all pre/coreqs.

Rationale: Stat 301 is a more appropriate co-requisite.

CE 330 Fundamentals of Environmental Engineering 3 credits

Principles of engineered environmental systems, including physical, chemical, and microbiological processes; types and effects of pollutants; regulations; treatment of water, wastewater, sludges, and solid waste; control of air and agricultural pollution. Two lectures and one 3-hour lab a week.

Prereq: ENGR 335, CHEM 111, CE 215 and MATH 310. A minimum grade of 'C' or better is required for all pre/coregs.

Rationale: Material covered in ENGR335 - Fluid Mechanics is not critical to succeeding in CE330. In addition, few junior colleges offer ENGR335 or equivalent - thus, this prerequisite adversely affects a smooth transition by Jr. College transfer students into our program, and potentially adversely impacts our enrollment.

CE 494 Senior Design Project

3 credits

Gen Ed: Senior Experience

Comprehensive civil engineering design project. Requires integration of skills acquired in civil engineering elective courses, written reports, and oral presentations. <u>Permission not guaranteed if not registered before fall recess.</u>

Prereq: <u>CE 491</u>, Senior standing in Civil Engineering, and Permission.

Rationale: Students work on real projects sponsored by professionals. Assembling projects takes time and planning, knowing how many students and their interests in advance is necessary. CE 491 will be used to help prepare students for CE 494.