

Date: October 12, 2010

UC 10914 10F

To: Cullen College of Engineering Undergraduate Curriculum Committee

From: Department of Civil and Environmental Engineering

APPROVED NOV 17 2010
qm

Please find the following proposed changes to the Civil Engineering program:

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1. Revised CE degree plan:

Adding courses in Geology or Biology and Physics lab and replacing current Chemistry I and II and their labs with Chemistry for Engineers & corresponding lab.

These changes are needed to satisfy ABET Civil Engineering Program Criteria of additional area of science while maintaining the same number of total credit hours.

These degree plan changes were unanimously approved by CEE faculty September 3, 2010.

Specific changes to the degree plan are:

First Year Fall

-Removed CHEM 1331 Fundamentals of Chemistry and CHEM 1111 Fundamentals of Chemistry Laboratory

-Added CHEM 1372 Fundamentals of Chemistry for Engineers and CHEM 1117 Fundamentals of Chemistry for Engineers Laboratory

First Year Spring

-Removed CHEM 1332 Fundamentals of Chemistry and CHEM 1112 Fundamentals of Chemistry Laboratory

-Added choice of GEOL 1330 Physical Geology or BIOL 1361 Introduction to Biological Science

The complete revised degree plan is attached.

2. Prerequisite changes to CIVE 3331. This is needed due to change in Chemistry course in 1.

CIVE 3331 CBM003; CIVE 3331 CBM003 – Supplement; and CIVE 3331 Syllabus are attached.

3. Course modification to CIVE 4311 to include additional course content to satisfy additional ABET Civil Engineering Program Criteria.

CIVE 4311 CBM003; CIVE 4311 CBM003 – Supplement; CIVE 4311 Syllabus attached.

4. Addition of a new senior elective course to the curriculum, CIVE 5380.

CBM003; CIVE 5380 CBM003 – Supplement; CIVE 5380 Syllabus attached.

Dean's Signature: _____

Dr. David P. Shattuck

Date: 13 Oct 2010

FIRST YEAR ⁴

Fall Semester	Hours
CIVE 1188. Challenge of Civil Engineering ⁵	1
CHEM 1372. Fundamentals of Chemistry for Engineers	3
CHEM 1117. Fundamentals of Chemistry for Engineers Laboratory	1
ENGL 1303. Freshman Composition I	3
MATH 1431. Calculus I ² (Approved Math/Reasoning Core Course)	4
HIST 1377. The United States to 1877 ¹	3
Total	15

Spring Semester	Hours
GEOL 1330. Physical Geology	3
OR	
BIOL 1361. Introduction to Biological Science	
CIVE 1331. Computing for Engineers	3
ENGL 1304. Freshman Composition II	3
MATH 1432. Calculus II	4
PHYS 1321. University Physics I	3
PHYS 1121. Physics Laboratory I	1
Total	17

SECOND YEAR

Fall Semester	Hours
CIVE 2330. Mechanics I (Statics)	3
Approved Humanities Core Course	3
MATH 2433. Calculus III	4
PHYS 1322. University Physics II	3
MECT 3341. Computer-Aided Drafting I	3
Total	16

Spring Semester	Hours
CIVE 2331. Mechanics II (Dynamics)	3
CIVE 2332. Mechanics of Deformable Solids	3
Social Sciences Core Course	3
INDE 2333. Engineering Statistics I	3
MATH 3321. Engineering Math	3
ENGI 2304. Technical Communications	3
Total	18

THIRD YEAR

Fall Semester	Hours
CIVE 3332. Engineering Materials	3
CIVE 3337. Theory of Structures	3
CIVE 3339. Geotechnical Engineering	3
ECE 3336. Introduction to Circuits and Electronics	3
ENGI 2334. Introduction to Thermodynamics	3
POLS 1336. U.S. and Texas Constitutions and Politics ¹	3
Total	18

Spring Semester	Hours
CIVE 3331. Environmental Engineering	3
CIVE 3434. Fluid Mechanics and Hydraulic Engineering	4
CIVE 4363. Concrete Design	3
INDE 3333. Engineering Economy I	3
POLS 1337. U.S. Government: Congress, President, and Courts ¹	3
Total	16

FOURTH YEAR

Fall Semester	Hours
CIVE 4311. Civil Engineering Design and Professional Practice	3
CIVE 4332. Hydrology	3
CIVE 4333. Water and Wastewater Treatment	3
CIVE 4369. Foundation Engineering	3
CIVE Elective ⁷	3
Total	15

Spring Semester	Hours
CIVE 4312. Civil Engineering Design Project ⁶	3
CIVE Elective ⁷	3
CIVE Elective ⁷	3
Visual/Performing Arts Core Course	3
HIST 1378. The United States since 1877 ¹	3
Total	15

Degree Total: **130 hrs.**