



Department of Civil and Environmental Engineering
Bachelor of Science in Civil Engineering
2005-2006 Curriculum

Freshman Year

First Semester (Fall)			Second Semester (Spring)		
Course		Hrs	Course		Hrs
	Institutional Core Option	3	CENG 1201	Civil Engineering Graphics	2
ENGL 1301	Grammar and Composition I	3	ENGL 1302	Grammar and Composition II	3
MATH 2413	Calculus I	4	MATH 2414	Calculus II	4
CHEM 1311	General Chemistry	3	PHYS 2325	University Physics I	3
CHEM 1111	Chemistry I Laboratory	1	PHYS 2125	Physics I Laboratory	1
ENGR 1200	Engineering Methods	2		Visual and Performing Arts Elective	3
		Semester Credit Hours			Semester Credit Hours
		16			16

Sophomore Year

First Semester (Fall)			Second Semester (Spring)		
Course		Hrs	Course		Hrs
CENG 2336	Geomatics	3	CENG 2253	Civil Engineering Measurement	2
CENG 2331	Civil & Environmental Engineering Computing	3	MENG 3306	Mechanics of Materials	3
ENGR 2301	Engineering Mechanics—Statics	3	MATH 3305	Differential Equations	3
MATH 3404	Multi-Variable Calculus	4	ENGR 2302	Engineering Mechanics—Dynamics	3
PHYS 2326	University Physics II	3	ECON 2302	Microeconomics	3
PHYS 2126	Physics II Laboratory	1	PHIL 2306	Introduction to Ethics	3
		Semester Credit Hours			Semester Credit Hours
		17			17

Junior Year

First Semester (Fall)			Second Semester (Spring)		
Course		Hrs	Course		Hrs
CENG 3338	Civil Engineering Materials	3	CENG 3361	Applied Engineering Hydrology	3
MENG 3310	Fluid Mechanics	3	CENG 3351	Transportation Engineering Systems	3
ENGR 3301	Probability & Statistics for Engineers	3	CENG 3333	Building Codes, Contracts and Specifications	3
ENGR 4306	Engineering Economics	3	CENG 3336	Soil Mechanics	3
	Additional Science Elective	3	CENG 3325	Structural Analysis	3
		Semester Credit Hours			Semester Credit Hours
		15			15

Senior Year

First Semester (Fall)			Second Semester (Spring)		
Course		Hrs	Course		Hrs
CENG 4351	Transp. & Regional Planning w/Laboratory	3	CENG ()	Engineering Design Elective	3
CENG ()	Structural Design Elective	3	CENG 4315	Senior Design II	3
CENG ()	Construction Engineering Elective	3	HIST 1302	United States History II	3
CENG 4115	Senior Design I	1	POLS 2306	Introduction to Texas Politics	3
HIST 1301	United States History I	3	ENGR 4109	Senior Seminar	1
POLS 2305	Introduction to American Government	3		World or European Literature Elective	3
		Semester Credit Hours			Semester Credit Hours
		16			16

Total Program Credit Hours: 128



Department of Civil and Environmental Engineering
Bachelor of Science in Civil Engineering
Civil and Environmental Engineering Electives

Construction Engineering

Course	Hrs
CENG 4331 Construction Planning and Scheduling	3
CENG 4336 Construction estimating, Bidding and Cost Control	3
CENG 4338 Construction Project Management	3

Structural Engineering

Course	Hrs
CENG 4306 Structural Steel Design	3
CENG 4302 Reinforced Concrete Design	3

At least one of these courses must be selected

Geotechnical Engineering

Course	Hrs
CENG 4356 Foundation Design	3

At least one of these courses must be selected

Transportation Engineering

Course	Hrs
---------------	------------

Hydrology and Environmental Engineering

Course	Hrs
CENG 4361 Environmental Engineering Design	3

Additional Science Elective

Course	Hrs
GEOL 3310 Physical Geology and Astronomy	3
GEOL 3314 Oceanography and Meteorology	3
BIOL 1306/1106 General Biology I	4
BIOL 2320/2121 Introduction to Microbiology	4

At least one of these courses must be selected