

Bachelor of Science in Engineering Technology – Structural Analysis/Design Option in Engineering Technology Major (Four Year Plan)

YEAR 1

Semester 1		Semester 2	
Course Number	Credit Hours	Course Number	Credit Hours
ENG 1301 (Composition I)[#] P: One of the following: (1) TSI ESSAY score of 4 and WRITING score of 340, (2) TSI ESSAY score of 5 and ABE WRITING diagnostic level 4, (3) TSI WRITING complete, OR (4) TSI WRITING exempt	3	ENG 1302 (Composition II) P: A grade of C or better in ENG 1301 or placement by examination	3
*PHYS 1307/1107 (General Physics I w/ Lab)^{&} P: Credit or enrollment in MATH 1302 or equivalent	4	*ENGR 1333 (Programming for Engineers) P: Credit or enrollment in MATH 2401	3
UHD 1303 (Freshman Seminar - Engineering) Transfer students see advisor for options	3	*MATH 2401 (Calculus I)^{#&} P: C or better in MATH 1404 or MATH 1505 or placement by exam taken at UHD	4
ENGR 1329/1129 (Concrete Technology with Lab)	4	Approved Language, Philosophy, and Culture course (p. 60) P: Refer to catalog	3
		Approved Oral Communication course (p. 60) P: Refer to catalog	3
Total Semester Hours	14	Total Semester Hours	16

YEAR 2

Semester 3		Semester 4	
Course Number	Credit Hours	Course Number	Credit Hours
*ENGR 2308 (Statics) P: MATH 2401 and co-requisite PHYS 1307	3	ENGR 2304 (Computer-Aided Drafting and Design I)	3
*CHEM 1307/1107 (General Chemistry I w/ Lab)^{&} P: Credit or enrollment in MATH 1301, ENG 1301, and 1 year of high school chemistry OR CHEM 1305/1105	4	*ENGR 2309/2109 (Mechanics of Materials with Lab) P: ENGR 2308	4
ENGR 2411 (Modern Methods of Engineering Analysis) P: ENGR 1333	4	Approved Am. Hist. course (p. 60) P: Enrollment in or completion of ENG 1301 or 010 core complete	3
Approved Am. Hist. course (p. 60) P: Enrollment in or completion of ENG 1301 or 010 core complete	3	POLS 2306 (Texas Government) P: Enrollment in or completion of ENG 1301 or 010 core complete	3
		Approved LL SAD elective Refer to catalog for list of options	3
Total Semester Hours	14	Total Semester Hours	16

YEAR 3

Semester 5		Semester 6	
Course Number	Credit Hours	Course Number	Credit Hours
ENGR 2306/2106 (Surveying w/lab) P: C or better in ENGR 2308	4	*ENGR 3302 (Engineering Economics) P: ENGR 1333 and Junior standing	3
*ENGR 3311 (Structural Analysis I) P: ENGR 2309/2109	3	*ENGR 3322 (Structural Analysis II) P: ENGR 3311 and ENGR 2411	3
*ENGR 3312 (Reinforced Concrete Design) P: ENGR 2309/2109	3	*ENGR 4321 (Structural Steel Design) P: Credit or enrollment in ENGR 3311	3
*ENGR 3323/3123 (Soil Mechanics w/ Lab) P: ENGR 2308	4	*ENGR 4322 (Foundation Design) P: ENGR 3323	3
		ENGR 3332 (Engineering Communication and Ethics) P: C or better ENG 1302 and junior standing	3
Total Semester Hours	14	Total Semester Hours	15

YEAR 3 – cont'd

Summer	
Course Number	Credit Hours
ENGR 3344 (Traffic and Transportation Engineering) P: MATH 2401, PHYS 1307	3
Total Semester Hours	3

YEAR 4

Semester 7		Semester 8	
Course Number	Credit Hours	Course Number	Credit Hours
ENGR 3308 (Fluid Mechanics) P: MATH 2401, PHYS 1307 and ENGR 2411	3	ENGR 4320 (Prestressed Concrete) P: ENGR 3312	3
ENGR 4333 (Construction Management) P: ENGR 2306	3	POLS 2305 (Federal Government) P: Enrollment in or completion of ENG 1301 or 010 core complete	3
ENGR 4135 (Senior Capstone Design I) P: ENGR 3311 and ENGR 3312	1	ENGR 4326 (Dynamics of Structure) P: ENGR 3311 co-requisite ENGR 3322 or ENGR 4321	3
Approved UL SAD elective Refer to catalog for a list of options	3	ENGR 4335 (Senior Capstone Design II) P: ENGR 4135	3
Approved Creative Arts course (p. 60)	3	Approved Social and Behavioral Sciences course (p. 60)	3
Total Semester Hours	13	Total Semester Hours	15

Total Credit Hours Required 120

* Critical course required to stay on track within major and take subsequent courses

Students are expected to place into ENG 1301 and MATH 2401 via CLEP or Bypass exams – placement tests determine which english or math course students should start with and additional courses may be necessary

& Satisfies both common core and major requirement/prerequisite