

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
*ENGR 1302 (Engineering & Technology Fundamentals) P: MATH 1302 or enrollment in MATH 1505	3	*ENGR 1400 (PC Applications in Engineering) P: MATH 1301	4
*PHYS 1307/1107 (General Physics I w/ Lab)& P: Credit or enrollment in MATH 1302 or equivalent	4	*MATH 2401 (Calculus I)#& P: C or better in MATH 1404 or MATH 1505 or placement by exam taken at UHD	4
UHD 1302 (Freshman Seminar - Mathematics) Transfer students see advisor for options	3	Approved Language, Philosophy, and Culture course (p. 60) P: Refer to catalog	3
Approved Social and Behavioral Sciences course (p. 60) P: Refer to catalog	3		
Total Semester Hours	16	Total Semester Hours	14

YEAR 2

Semester 3		Semester 4	
Course Number	Credit Hours	Course Number	Credit Hours
*ENGR 2308 (Statics) P: MATH 2401 and corequisite PHYS 1307	3	ENGR 2304 (Computer-Aided Drafting and Design I) P: ENGR 1302 and ENG 1301	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 2409 (Engineering Mechanics with Lab) P: ENGR 2308	4
ENGR 2411 (Modern Methods of Engineering Analysis) P: MATH 2401 and ENGR 1400	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
POLS 2305 (Federal Government) P: Enrollment in or completion of ENG 1301 or 010 core complete	3	Approved Oral Communication course (p. 60) P: Refer to catalog	3
Total Semester Hours	17	Total Semester Hours	16

YEAR 3

Semester 5		Semester 6	
Course Number	Credit Hours	Course Number	Credit Hours
ENGR 2407 (Surveying with GIS-GPS) P: ENGR 2304	4	*ENGR 3302 (Engineering Economics) P: ENG 1302, ENGR 1400, MATH 2401 and Junior standing	3
*ENGR 3311 (Structural Analysis I) P: ENGR 2308, ENGR 2409	3	*ENGR 3322 (Structural Analysis II) P: ENGR 3311	3
*ENGR 3312 (Reinforced Concrete Design) P: ENGR 2308, ENGR 2409	3	*ENGR 4321 (Structural Steel Design) P: Credit or enrollment in ENGR 3311	3
*ENGR 3321 (Soil Mechanics w/ Lab) P: ENGR 2409	3	*ENGR 4322 (Foundation Design) P: ENGR 3321, ENGR 3312	3
ENGR 3329 (Concrete Technology with Lab) P: ENGR 1400 or CHEM 1307	3	TCOM 3302 (Business & Technical Report Writing) P: Successful completion of ENG 1302 and the Language, Philosophy & Culture core component	3
Total Semester Hours	16	Total Semester Hours	15

YEAR 4

Semester 7		Semester 8	
Course Number	Credit Hours	Course Number	Credit Hours
ENGR 3308 (Fluid Dynamics) P: MATH 2401, PHYS 1307 and ENGR 2411	3	ENGR 4320 (Prestressed Concrete) P: ENGR 3312	3
ENGR 4428 (Construction Management) P: ENGR 3321, ENGR 3302	4	ENGR 4323 (Engineering Seminar) P: Senior standing and departmental approval	3
ENGR 4435 (Senior Capstone Project) P: ENGR 3312, ENGR 4321, ENGR 4322	4	ENGR 4326 (Dynamics of Structure) P: ENGR 4321 or corequisite ENGR 3322	3
Approved Creative Arts course (p. 60) P: Refer to catalog	3	Approved UL elective	3
Total Semester Hours	14	Total Semester Hours	12

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