

8 Semester Plan for Civil Engineering, TAMU-CC

Revised 11 Apr 2023

1st Year	Course	Course Title	SH	Pre-requisite(s) or Co-Requisite(s)
1st Semester (includes triad/tetrad)	ENGL 1301	Composition I	3	
	HIST 1301	U.S. History to 1865	3	
	MATH 2413	Calculus I	4	Pre-req: A grade of C or better in MATH 1316 Trigonometry or MATH 2312 Precalculus, or placement into MATH 2413 Calculus I
	CHEM 1411	General Chemistry I	4	
	ENGR 1201	Introduction to Engineering	2	Prereq: MATH 1314 - College Algebra or equivalent academic preparation
	UNIV 1101	University Seminar I (for triad/tetrad)	1	
		Total HRS	17	
2nd Semester (includes triad/tetrad)	ENGL 1302 or COMM 1311	Writing and Rhetoric OR Foundations of Communication	3	Prereq: ENGL 1301 for ENGL 1302
	PHYS 2425	University Physics I	4	Prereq: MATH 2413 Calculus I or placement beyond
	MATH 2414	Calculus II	4	Prereq: A grade of C or better in MATH 2413 Calculus I
	COSC 1330	Program for Scientists, Engineers, and Mathematicians	3	
	ENGR 1312	Engineering Graphics I	3	Prereq: MATH 1314 - College Algebra or equivalent academic preparation
	UNIV 1102	First-Year Seminar II (for triad/tetrad)	1	
		Total HRS	18	
2nd Year				
1st Semester	HIST 1302	U.S. History Since 1865	3	
	ENGR 2325	Statics	3	Prereq: PHYS 2425 University Physics I; pre-req/co-req: MATH 2414 - Calculus II
	PHYS 2426	University Physics II	4	Prereq: MATH 2414 Calculus II & PHYS 2425 University Physics I
	MATH 3315	Differential Equations	3	Prereq: A grade of C or better in MATH 2414
	MATH 2415	Calculus III	4	Prereq: A grade of C or better in MATH 2414 Calculus II
		Total HRS	17	
2nd Semester		Language, Philosophy and Culture (3 semester hours)	3	
		Additional Science Elective: GISC 1470 Geospatial Systems I or GEOL 1403 Physical Geology	4	
	ENGR 3322	Materials Science	3	Prereq: CHEM 1411 General Chemistry I & PHYS 2425 University Physics I
	ENGR 2326	Dynamics	3	Prereq: ENGR 2325 - Statics
		Total HRS	13	
3rd Year				
1st Semester	POLS 2305	U.S. Government and Politics	3	
	MATH 3342	Applied Probability and Statistics	3	Prereq: MATH 2413 Calculus I
	ENGR 3315	Fluid Mechanics	3	Prereq: ENGR 2326 - Dynamics and MATH 2415 - Calculus III and MATH 3315 - Differential Equations
	ENGR 3320	Strength of Materials	3	Prereq: ENGR 2325 - Statics and ENGR 3322 - Materials Science
	CEEN 2315	Geomatics and Surveying Engineering	3	Prereq: MATH 1316 – Trigonometry or MATH 2413 – Calculus I
		Total HRS	15	
2nd Semester	POLS 2306	State and Local Government	3	
	CEEN 3321	Structural Analysis	3	Prereq: ENGR 3320 Strength of Materials
	CEEN 3320	Geotechnical Engineering I	3	Prereq: ENGR3315 – Fluid Mechanics and ENGR 3320 – Strength of Materials.
	CEEN 4312	Hydraulics and Hydrology	3	Prereq: ENGR 3315 – Fluid Mechanics.
	CEEN 4304	Construction Materials Design	3	Prereq: ENGR 3320 Strength of Materials
		Technical Elective	3	
		Total HRS	18	
4th Year				
1st Semester		Social and Behavioral Sciences	3	
	ENGR 4240	Project Management ( <b>Major GPA of 2.25</b> )	2	Prereq: CEEN 3320 Geotechnical Engineering I & CEEN 3321 Structural Engineering
	ENGR 4420	Engineering Lab Measurement	4	Prereq: PHYS 2426 University Physics II and (MATH 3342 Applied Probability and Statistics or MATH 3345 Statistical Modeling and Data Analysis)
	CEEN 4325	Reinforced Concrete Design	3	Prereq: CEEN 3321 Structural Analysis; prereq or co-req CEEN 4304 Construction Materials Design
	CEEN 4323	Structural Steel Design	3	Prereq: CEEN 3321 Structural Analysis; prereq or co-req CEEN 4304 Construction Materials Design
		Total HRS	15	
2nd Semester		Creative Arts	3	
	CEEN 4306	Transportation Engineering	3	Prereq: CEEN 2315 – Geomatics and Surveying Engineering
	ENGR 4370	Capstone Projects	3	Prereq: ENGR 4240 Project Management; co-req: SMTE 0099
		Technical Elective	3	
		Technical Elective	3	
		Total HRS	15	

Completed Hours	126
Completed Hours (includes First-Year Seminar I & II)	128