



Department of Civil and Architectural Engineering
Civil Engineering Program Curriculum

Effective Fall 2025

Fall				Spring			
Freshman Year							
ENGL	1010	Freshman English I	3	ENGL	1020	Freshman English II	3
MATH	1910	Calculus I	4	MATH	1920	Calculus II	4
CHEM	1110	General Chemistry I	3	PHYS	2110	Calculus based Physics I	3
CHEM	1111	General Chemistry I Lab	1	PHYS	2111	Calculus based Physics I Lab	1
ENGR	1020	Freshman Engineering Seminar	1	ENGR	2240	Engineering Programming	3
ENGR	1151	Computer Engr Graphics	1				
UNIV	1000	Orientation	1				
			<u>14</u>				<u>14</u>
Sophomore Year							
MATH	2110	Calculus III	4	ENGR	2130	Mechanics of Materials	3
COMM	2200	Speech	3	ENGR	2131	Mechanics of Materials Lab	1
ENGR	2110	Engineering Mechanics I	3	ENGR	2120	Engineering Mechanics II	3
PHYS	2120	Calculus based Physics II	3	MATH	3120	Ordinary Differential Equation	3
PHYS	2121	Calculus based Physics II Lab	1	ENGL		English Literature (Hum. Elect)	3
BIOL	1110	General Biology	2	HIST	2010	American History I	3
BIOL	1111	General Biology Lab	1				
			<u>17</u>				<u>16</u>
Junior Year							
CVEN	3000	<u>Intro to Environmental Engr</u>	3	CVEN	3130	<u>Soil Mechanics</u>	3
CVEN	3100	Fluid Mechanics	3	CVEN	3131	<u>Soil Mechanics Lab</u>	1
CVEN	3101	<u>Fluid Mechanics Lab</u>	1	CVEN	3200	<u>Transportation Engineering</u>	3
CVEN	3400	<u>Structural Testing</u>	1	CVEN	3250	<u>Hydraulic Engineering</u>	3
CVEN	3410	Structural Analysis	3	CVEN	4361	<u>Environmental Engineering Lab</u>	1
ENGR	2200	Probability & Statistics	3	HIST	2020	American History II	3
		Social Science Elective	3			Humanities Elective	3
			<u>17</u>				<u>17</u>
Senior Year							
CVEN	3420	<u>Reinforced Concrete Design</u>	3	ENGR	4201	Engineer in Training Lab	0
CVEN	3350	<u>Hydrology</u>	3	CVEN	4250	<u>Water/Wastewater Engineering</u>	3
CVEN	4320	<u>Highway Engineering</u>	3	ENGR	4510	Capstone Design Project II	1
CVEN	4440	<u>Foundation Engineering</u>	3	CVEN	4470	<u>Construction Management</u>	3
ENGR	4500	Capstone Design Project I	1	CVEN		Technical Elective(1)	3
ENGR	4900	Prof Development Seminar	1			Social Science Elective	3
CVEN		Technical Elective(1)	3			Humanities Elective	3
			<u>17</u>				<u>16</u>

ALL STUDENTS ARE REQUIRED TO PASS OR TO BE WAIVED ENGINEERING ENTRANCE EXAMINATION PRIOR TO ENROLLING IN ENGINEERING UPPER (300-400) LEVEL COURSES

SOCIAL SCIENCE and HUMANITIES ELECTIVES MUST BE CHOSEN FROM AN APPROVED LIST COURSES

(1) TECHNICAL ELECTIVE MUST BE CHOSEN FROM AN APPROVED LIST OF DESIGN COURSES:

CVEN 3440: STEEL DESIGN CVEN 4520: CIVIL ENGR DESIGN + OTHERS

ITALIC AND UNDERLINE COURSE ONLY BE OFFERED ONCE PER YEAR IN SPECIFIED FALL OR SPRING SEMESTER

TOTAL REQUIRED NUMBER OF CREDIT HOURS IS

128