

U.A. WHITAKER COLLEGE OF ENGINEERING

BACHELOR OF SCIENCE IN ENVIRONMENTAL ENGINEERING (B.S.ENV.E.) AND BACHELOR OF SCIENCE IN CIVIL ENGINEERING (B.S.C.E.)
150 Credits

Freshman Year					
Semester 1 (Fall Term)			Semester 2 (Spring Term)		
Course	Course Title	CR	Course	Course Title	CR
EGS 1006L	Intro to Engineering Prof.	1	EGN 1041C	Computational Tools for Eng	2
ENC 1101	Composition I	3	PHY 2048C	General Physics I	4
XXX XXXX	State Core Humanities*	3	MAC 2312	Calculus II	4
MAC 2311	Calculus I	4	ENC 1102	Composition II	3
CHM 1045C	General Chemistry I w/Lab	4	XXX XXXX	Humanities *	3
Total		15	Total		16
Sophomore Year					
Semester 3 (Fall Term)			Semester 4 (Spring Term)		
Course	Course Title	CR	Course	Course Title	CR
EGM 3420C	Engineering Mechanics	4	EGN 3343C	Thermodynamics	3
MAC 2313	Calculus III	4	ENV 3006C	Fundamentals of Environ Engineering	3
XXX XXXX	Free Elective	4	EGN 2111C	Engineering Computer Graphics	3
PHY 2049C	General Physics II w/Lab	4	MAP 2302	Differential Equations	3
Total		16	Total		16
Summer Term			*Special Notes: Students must earn at least 9 semester hours by attending one or more summer sessions Students should be sure one of their social science or humanities include 1 course that is designated with an attribute for College Level Writing Skills (CLWS), 2 courses that are designated with an attribute for Intercultural Knowledge (INKN), and 1 course that satisfies the Civic Literacy requirement. Please be aware that 1 course may satisfy multiple attributes. Example: AML 2010 = Humanities, College Level Writing, and Intercultural Knowledge (GEHM, CLWS, INKN).		
Course	Course Title	CR			
XXX XXXX	State Core Social Science* (AMH 2020 or POS 2041)	3			
EGN 3331C	Mechanics of Materials	3			
XXX XXXX	Free Elective	3			
XXX XXXX	Humanities*	3			
Total		12			
Junior Year					
Semester 5 (Fall Term)			Semester 6 (Spring Term)		
Course	Course Title	CR	Course	Course Title	CR
EES 3204C	Environmental Chemistry for Engineers	3	EGN 3641C	Engineering Entrepreneurship	3
ENV 4351	Solid Waste Management	3	ENV 3502C	Water Treatment Engineering	3
CWR 3201C	Engineering Fluid Mechanics	3	ENV 4330C	Hazardous Waste Remediation	3
CCE 3101C	Civil Engineering Materials	3	CWR 3202C	Hydrology and Hydraulics	3
STA 2023	Statistical Methods	3	CGN 3323C	Surveying and Geomatics	3
Total		15	Total		15
Semester 7 (Fall Term)			Semester 8 (Spring Term)		
Course	Course Title	CR	Course	Course Title	CR
ENV 4101C	Atmospheric Pollution	3	ENV 4891	Environmental Engineering Senior Design	3
ENV 4509C	Wastewater Engineering	3	ENV 4612	Sustainability in Engineering	3
CWR 4540C	Water Resource Design	3	TTE 3002C	Transportation Engineering	3
CCE 4031	Project Planning and Regulations	3	CES 3100C	Structural Analysis	3
EES 4102C	Wastewater Microbiology	3	CEG 3011C	Geotechnical Engineering I	3
Total		15	Total		15
Senior Year					
Semester 9 (Fall Term)			<i>B.S. Env.E. Environmental Engineering & BSCE Civil Engineering 2018-2019</i>		
Course	Course Title	CR	Engineering Common Core - Engineering Courses		
CEG 4012C	Geotechnical Engineering II	3	Engineering Courses unique to B.S. in Environmental Engineering		
CES 4702C/CES 4605	Reinforced Concrete Design or Steel Design	3	Engineering Courses unique to B.S. in Civil Engineering		
IDS 3920	University Colloquium	3	Engineering Courses shared by Civil and Environmental Engineering		
XXX XXXX	Social Science* (recommend ECO 2013 or ECO 2023)	3	TOTAL ENGINEERING CREDITS		
XXX XXXX	Choose Geology (3-4)	3	82		
Total		15			
Prerequisites for Engineering Coursework (all prerequisites require a minimum grade of C)					
Course	Prerequisites	Course	Prerequisites		
CCE 3101C	EGN 3331C	EES 3204C	PHY 2049C, EGN 1041C, CHM 1046C & ENV 3006C		
CCE 4031	EGN 3641C	EGN 3641C	EGN 3331C or EGN 3343C		
CEG 3011C	CWR 3201C & EGN 3331C	ENV 3502C	EES 3204C		
CEG 4012C	CEG 3011C	ENV 4101C	ENV 3006C & CWR 3201C		
CES 3100C	EGN 3331C & EGN 2111C	ENV 4330C	ENV 3006C, CWR 3201C, EGN 3343C & EES 3204C		
CES 4605	CES 3100C	ENV 4351	ENV 3006C		
CES 4702C	CES 3100C & CCE 3101C	ENV 4509C	ENV 3006C & CWR 3202C		
CGN 3323C	EGM 3420C	ENV 4612	ENV 3006C & CCE 4031		
CWR 3201C	MAP 2302, EGM 3420C & PHY 2049C	ENV 4891	EES 3204C, ENV 3502C, ENV 4101C, ENV 4330C, ENV 4351, ENV 4509C, CCE 4031 & CWR 4540C		
CWR 3202C	CWR 3201C & (STA 2037 or STA 2023)	TTE 3002C	CGN 3323C & STA 2037/2023		
CWR 4540C	CWR 3202C				
Choose a Geology (all prerequisites require a minimum grade of C)					
Course	Course Title	MCB / GLY	Prerequisites	CR	
GLY 1000	Physical Geology	Geology	None	4	
GLY 2030	Environmental Geology	Geology	None	3	
GLY 4074C	Meteorology & Climatology	Geology	None	3	