

U.A. WHITAKER SCHOOL OF ENGINEERING BACHELOR OF SCIENCE IN CIVIL ENGINEERING (B.S.C.E.) 128 Credits						
Freshman Year						
Semester 1			Semester 2			
Course Number	Course Title	CR	Course Number	Course Title	CR	
1	EGN 1006L	Intro to Engineering Prof.	1	EGN 1041C	Computational Tools for Eng	2
	ENC 1101	Composition I (W)	3	PHY 2048C	General Physics I	4
		Humanities*	3	MAC 2312	Calculus II	4
	MAC 2311	Calculus I	4	ENC 1102	Composition II (W)	3
	Choose one	BSC 1010C General Biology w/lab I OR GLY 1000C Physical & Historical Geology	4	HUM 2510	Understanding Visual & Performing Arts	3
		Total	15		Total	16
Sophomore Year						
Semester 3			Semester 4			
Course Number	Course Title	CR	Course Number	Course Title	CR	
4	EGM 3420C	Engineering Mechanics	4	EGN 3331C	Mechanics of Materials	3
	MAC 2313	Calculus III	4	EGN 2111C	Engineering Computer Graphics	2
	CHM 1045C	Gen Chemistry w/Lab I	4	ENV 3006C	Fundamentals of Environ Engrg	3
	PHY 2049C	General Physics II	4	MAP 2302	Diff Equations	3
		Total	16	CHM 1046C	Gen Chemistry w/Lab II	4
				Total	15	
Summer term*						
		Social Science (recommend ECO 2023)	3			
		Social Science*	3			
		Humanities*	3			
		Total	9			
*One of these courses must be a writing course to satisfy the Gordon Rule (W).						
NOTE: Students must earn at least 9 semester hours by attending one or more summer sessions at a State University System member institution.						
Junior Year						
Semester 5			Semester 6			
Course Number	Course Title	CR	Course Number	Course Title	CR	
2	EGN 3641C	Engineering Entrepreneurship	3	CEG 3011C	Geotechnical Engineering I	3
3	CCE 3101C	Civil Engineering Materials	3	TTE 3002C	Transportation Engineering	3
3	CWR 3201C	Engineering Fluid Mechanics	3	CES 3100C	Structural Analysis	3
3	CGN 3323C	Surveying and Geomatics	3		Technical Elective 1, * or **	3
	STA 2037	Statistics with Calculus	3	CWR 3202C	Hydrology and Hydraulics	3
		Total	15		Total	15
Senior Year						
Semester 7			Semester 8			
Course Number	Course Title	CR	Course Number	Course Title	CR	
3	CEG 4012C	Geotechnical Engineering II	3	CGN 4802C	Civil Engin Senior Design	3
0		Technical Elective 2, * or **	3		Environmental Engineering Elective**	3
3	choose one	CES 4702C Reinforced Concrete Design OR CES 4605C Steel Design	3		Free Elective (see suggested classes)	3
2	CCE 4031	Project Planning and Regulations	3	IDS 3920	University Colloquium (W)	3
3	CWR 4540C	Water Resources Design	3			
		Total	15		Total	12
27	Minimum total engineering topics = 48					26

Total Hours = 128

Engineering common core - engineering courses		*Possible Technical Electives:	
Engineering courses unique to B. S. in Civil Engineering		CES 4605C	Steel Design 3
Engineering courses shared by Civil and Environmental Engineering		CES 4702C	Reinforced Concrete Design 3
		EVR 4934	Environmental GIS 3
		GIS 5306C	Graphic Information Systems 3
		GLY 2030C	Environmental Geology 3
		GLY 3420C	Tectonics and Marine Geology 4
		GLY 4700C	Coastal & Watershed Geology 3
		TTE 4201C	Traffic Engineering 3
Suggested Free Electives		**Possible Env Engr Electives or Technical Electives:	
MAN 0262	Ethical Issues 3	ENV 4351	Solid Waste Management 3
MAN 3025	Principles of Management 3	ENV 4330C	Hazardous Waste Remediation 3
FIN 2100	Personal Finance 3	EES 3204C	Environ Chem for Engineers 3
ECO 2013	Principles of Macro Economics 3	ENV 3502C	Water Treatment Engineering 3
ECO 2023	Principles of Micro Economics 3	ENV 4509C	Wastewater Engineering 3
ENC 3250	Professional Writing 3	ENV 4101C	Atmospheric Pollution 3
MAS 3105	Linear Algebra 3	ENV 4612	Sustainability in Engineering 3
MAP 3161	Math for Science & Engineering 4		