

# RECOMMENDED ACADEMIC PLAN – STRUCTURAL DESIGN AND CONSTRUCTION ENGINEERING TECHNOLOGY

Semester I		Semester II	
ENGL 015 Rhetoric and Composition or ENGL 030 Honors Freshman Composition (GWS)	3	CAS 100 Effective Speech (GWS)	3
CHEM 110 Chemical Principles I (GN)	3	MATH 140 Calculus With Analytic Geometry I (GQ)	4
CHEM 111 Experimental Chemistry I (GN)	1	ECON 002 Introductory Microeconomic Analysis and Policy, ECON 004 Introductory Macroeconomic Analysis and Policy, or ECON 014 Principles of Economics (GS)	3
EDSGN 100 Introduction to Engineering Design or EGT 101 Technical Drawing Fundamentals and EGT 102 Introduction to Computer Aided Drafting	2-3	Social and Behavioral Sciences (GS)	3
Arts (GA)	3	Humanities (GH)	3
First-Year Seminar (FYS)	1		
	13-14		16
Semester III		Semester IV	
PHYS 150 Technical Physics I, PHYS 250 Introductory Physics I or PHYS 211 General Physics: Mechanics (GN)	3-4	PHYS 151 Technical Physics II, PHYS 251 Introductory Physics II or PHYS 212 General Physics: Electricity and Magnetism (GN)	3-4
MATH 141 Calculus with Analytic Geometry II or STAT 200 Elementary Statistics (GQ)	4	ENGL 202C Effective Writing: Technical Writing (GWS)	3
CMPSC 101 Introduction to C++ Programming, CMPSC 121 Introduction to Programming Techniques, or CMPSC 200/ 201/ 202 Programming for Engineers with MATLAB/ C++/ FORTRAN (GQ)	3	<b>ET 300 Mechanics I: Statics, MCHT 111 Mechanics for Technology: Statics or E MCH 211 Statics</b>	3
ACCTG 211 Financial and Managerial Accounting for Decision Making, MGMT 100 Survey of Management or MGMT 301 Basic Management Concepts	3-4	Humanities (GH)	3
Arts (GA)	3	Elective	3
	16-18		15-16
Semester V		Semester VI	
ET 200 Graphic Communications	3	IE 303 Engineering Economy Analysis	2
<b>ET 322 Strength of Materials, MCHT 213 Strength &amp; Properties of Materials or E MCH 213 Strength of Materials</b>	3	CET 308 Construction Methods and Materials	3
ET 323 Strength of Materials Laboratory or MCHT 214 Strength and Properties of Materials Laboratory	1	CET 343 Soils and Fluid Mechanics	3
CET 242 Civil Engineering Materials - Concrete and Bituminous	2	<b>CET 430 Structural Analysis</b>	3
C E 310 Surveying or SUR 111 Plane Surveying	3	<b>CET 435 Construction Estimating</b>	3
<b>C E 333W Construction Management I</b>	3	SSET 295 Internship	1
	15	*Option Selection	3
			18
Semester VII		Semester VIII	
<b>C E 254 Personal and Occupational Safety (GHA)(US)</b>	3	CET 434 Foundations	3
<b>CET 431 Structural Design - Steel</b>	3	<b>C E 488C Capstone Project-Construction or C E 488D Capstone Project - Structural Design</b>	3
<b>CET 432 Structural Design - Reinforced Concrete</b>	3	*Option Selection	3
<b>C E 488C Capstone Project - Construction or C E 488D Capstone Project - Structural Design</b>	1	*Option Selection	3
*Option Selection	3	*Option Selection or Elective	3
*Option Selection	3		
	16		15

## Advising Notes

- **Bold type** require a grade of C or better.
- *Italics* indicates courses that satisfy both major and General Education requirements.
- **Bold Italics** indicates courses requiring a quality grade of C or better and that satisfy both major and General Education requirements.
- GWS, GHA, GQ, GN, GA, GH, and GS are codes used to identify General Education requirements.
- US, IL, and US;IL are codes used to designate courses that satisfy University United States/International Cultures requirements.
- W is the code used to designate courses that satisfy University Writing Across the Curriculum requirements.

\* Courses listed in Option Selection must be chosen from the selected option in the SDCET program: Construction Management, Structural Design, or General.

*Students must complete a 3-credit course in "United States Cultures (US)" and a 3-credit course in "International Cultures (IL)."*

## CONSTRUCTION MANAGEMENT OPTION (19 - 21 credits)

**C E 456 Planning and Scheduling (3); C E 458 Construction Management II (3); C E 488C Capstone Project (4);** A E 310 Fundamentals of HVAC (3); ACCTG 211 Financial and Managerial Accounting (4) and either MGMT 100 Survey of Management (3) or MGMT 301 Basic Management Concepts (3); Approved Selection (3-4)

## STRUCTURAL DESIGN OPTION (19 - 20 credits)

**C E 445 Advanced Structural Analysis (3); C E 449 Advanced Structural Design (3); C E 488D Capstone Project (4);** ET 321 Dynamics or E MCH 212 Dynamics (3); CET 361 Fluid Flow or C E 360 Fluid Mechanics (3); Approved Selection (3-4)

## GENERAL OPTION (22 credits)

**C E 445 Advanced Structural Analysis (3); C E 449 Advanced Structural Design(3); C E 456 Planning and Scheduling (3); C E 458 Construction Management II (3); C E 488C or 488D Capstone Project (4);** A E 310 Fundamentals of HVAC (3); CET 361 Fluid Flow or C E 360 Fluid Mechanics (3)

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