

**BSCE Degree
Department of Engineering**



Starting Date: Fall 2007

All engineering & technical elective courses must have a combined minimum GPA of 2.0.

Course sequencing follows the academic year, and assumes beginning the program in the Fall Semester.

P = Pre-requisite, C = Co-Requisite or Pre-requisite

For more information visit <http://www.engr.ipfw.edu>

1 st Semester 16 credits	MA 165 (4) P: MA 154 or MA 159 (C+), or placement Calculus I	CHM 115 (4) P: CHM 111 or 1 yr. H.S. C: MA 153 or MA 151 General Chemistry	ENGR 101 (1) Introduction to Engineering	ENGR 120 (2) P: MA 153 Area V Graphical Communication	ENGR 121 (2) P: MA 154 or MA159 (C+), or placement C: ENGR 120 Computer Tools	ENG W131 (3) P: ENG W130 (C+), or placement Elementary Composition
2 nd Semester 15 credits	MA 166 (4) P: MA 165 (C+) Calculus II	PHYS 152 (5) C: MA 166 Mechanics	ENGR 199 (3) P: ENGR 101 C: ENGR 121, PHYS 152 Intro to Engineering Design	COM 114 (3) (C +) Fund of Speech Communication		
3 rd Semester 17 credits	MA 261 (4) P: MA 166 (C+) Multivariate Calculus	MA 351 (3) P: MA 166 (C+) Elementary Linear Algebra	PHYS 251 (5) P: PHYS 152 C: MA 261 Heat Electricity and Optics	CE 250 (3) P: PHYS 152 C: MA 261 Statics	ENGR 221 (2) P: ENGR 101, ENGR121 C and C++ Programming	
4 th Semester 18 credits	MA 363 (3) P: MA 351 Differential Equations	CE 251 (3) P: CE 250 C: MA 363 Dynamics	ME 200 (3) C: MA 261 Thermodynamics I	CE 252 (3) P: CE 250 C: MA 363 Strength of Materials	CE 210 (3) P: MA 165 ENGR 120 Introduction to Geomatics	General Education Elective (3) Area III
5 th Semester 18 credits	CE 318 (3) P: ME 200, CE 251, MA 363 Fluid Mechanics	CE 375 (3) P: CE 252 Structural Analysis	CE 315 (3) P: CE 252 CE Materials	CE 345 (3) C: CE 210 Transportation Engineering	STAT 511 (3) P: MA 166 Statistical Methods	ECON E 201 (3) Area III Intro to Microeconomics
6 th Semester 14 credits	CE 319 (1) P: CE 318 Fluid Mechanics Lab	CE 365 (3) P: CHM 115 C: CE 318 Environmental Engineering	CE 316 (1) P: CE 315 CE Materials Lab	CE 380 (3) P: CE 252 CE 318 Soil Mechanics	CE 376 (3) P: CE 375 Design of Concrete Structures	CE 330 (3) C: STAT 511 Construction Management
7 th Semester 15 credits	CE 418 (3) P: CE 318 C: CE 319 Hydraulics	CE 366(1) P: CE 365 Environmental Engineering Lab	CE 487 (1) P: CE 376 Civil Engineering Design Project I	CE 381(1) P: CE 380 Soil Mechanics Lab	1st Tech. Elec. (3) 2nd Tech. Elec. (3)	General Education Elective (3) Area IV
8 th Semester 15 credits	3rd Tech. Elec. (3)	4th Tech. Elec. (3)	CE 488 (3) P: CE 487 Civil Engineering Design Project II	General Education Elective (3) Area IV	General Education Elective (3) Area VI	

Total credit hours: 128

Key:

Math & Science	Freshmen Engineering	Civil Engineering	Mechanical Engineering	General Education
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