

# Bachelor of Science in Computer Engineering (BSCmpE) Degree Department of Engineering



Effective date: **Fall 2008**

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.

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

P = Prerequisite, C = Corequisite, DC = Design Content

1 <sup>st</sup> semester 16 credits	<b>MA 165 (4)</b> P: MA 154 or MA 159 (C or better), or placement	<b>CHM 115 (4)</b> P: CHM 111 or 1 yr. H.S. C: MA 153 or MA 151	<b>ENGR 101 (1)</b>  Area V	<b>ENGR 120 (2)</b> P: MA 153  Area V	<b>ENGR 121 (2)</b> P: MA 154 or MA 159 (C or better), or placement C: ENGR 120	<b>ENG W131 (3)</b> P: ENG W130 (C or better) or placement
	Anlytc Geomtry&Calc I	General Chemistry	Intro To Engineering	Graph Com & Spatl Anly	Cmpr Tools For Engr	Elem Composition I
2 <sup>nd</sup> semester 15 credits	<b>MA 166 (4)</b> P: MA 165 (C or better)	<b>PHYS 152 (5)</b> C: MA 166	<b>ENGR 199 (3)</b> P: ENGR 101 C: ENGR 121,PHYS 152 DC	<b>COM 114 (3)</b> C or better		
	Anlytc Geomtry&Calc II	Mechanics	Intro To Engr Design	Fundament Of Speech		
3 <sup>rd</sup> semester 18 credits	<b>MA 261 (4)</b> P: MA 166 (C or better)	<b>MA 351 (3)</b> P: MA 166 (C or better)	<b>PHYS 251 (5)</b> P: PHYS 152 C: MA 261	<b>ECE 201 (3)</b> C: MA 261	<b>ENGR 221 (2)</b> P: ENGR 101, ENGR 121	<b>ENGR 222 (1)</b> C: ENGR 221
	Multivariate Calculus	Elem Linear Algebra	Heat Electricity & Optics	Linear Circuit Anly I	C & C++ Prog for Engr	Object Orient Program
4 <sup>th</sup> semester 15 credits	<b>MA 363 (3)</b> P: MA 261 and MA 351	<b>ECE 202 (3)</b> P: ECE 201 C: MA 363 DC	<b>ECE 270 (4)</b> P: ENGR 199 DC	<b>ECE 293 (2)</b> P: ECE 201, COM 114, ENG W 131	<b>ME 253 (3)</b> P: MA 261, PHYS152	
	Differential Equations	Linear Circuit Anly II	Intro Digitt Sys Desgn	Measure & Instrumentn	Statics/Dynamics	
5 <sup>th</sup> semester 16 credits	<b>MA 275 (3)</b> P: MA 261	<b>ECE 301 (3)</b> P: ECE 202	<b>ECE 358 (3)</b> P: ECE 270, ENGR 221 DC	<b>ECE 387 (3)</b> P: ECE 201, ENGR 199, ENGR 221 C :ME 253 DC	<b>ECE 388 (1)</b> C: ECE 387 DC	<b>ECE 368 (3)</b> P: ENGR 222 DC
	Intermed Discrete Math	Signals And Systems	Intro To VHDL	Elec & Sys Engr Robotc	Elec&Sys Eng Robot Lab	Data Structures
6 <sup>th</sup> semester 16 credits	<b>ECE 302 (3)</b> P: MA 363, ECE 301	<b>ECE 362 (4)</b> P: ECE 270, ECE 293, ECE 388 DC	General Education Elective (3)  Area III	<b>ECON E201 (3)</b>  Area III	General Education Elective (3)  Area IV	
	Probabilistic Methods	Micropro Sys & Infrac		Intro To Microeconomic		
7 <sup>th</sup> semester 16 credits	<b>ECE 405 (3) or ENGR 410 (3)</b> P: ECE 301, ECE 362, ECE 368, MA 275 (or permission of the senior design advisor) DC	<b>ECE 495 (4)</b> P: ECE 362, ECE 368 DC	Computer Engineering Elective (3)	Technical Elective (3)	General Education Elective (3)  Area IV	
	Sr Engineering Des I	Embedd Real-Time OS				
8 <sup>th</sup> semester 16 credits	<b>ECE 406 (3) or ENGR 411 (3)</b> P: ECE 405 or ENGR 410 DC	<b>ECE 437 (4)</b> P: ECE 362, ECE 358 DC	Computer Engineering Elective (3)	Technical Elective (3)	General Education Elective (3)  Area VI	
	Sr Engineering Des II	Computer Des&Prototyp				

Revised March 2008

Total credit hours 128