Bachelor of Science in Electrical Engineering (BSEE) Degree
Department of Engineering

Effective date: Fall 2015
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://ipfw.edu/engineering/

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

1st semester 15 credits	MA 165 (4) P: MA 154 or MA 159 (C- or better), or placement	CHM 115 (4) P: CHM 111 or 1 yr. H.S. C: MA 154	ENGR 127 (4) C: MA 154	ENG W131 (3) P: ENG W129 (C or better) or placement		
	Anly. Geometry & Calc. I GenEd A3	General Chemistry GenEd B4	Engr. Fundamentals I	Elem. Composition I GenEd A1		
2nd semester 16 credits	MA 166 (4) P: MA 165 (C- or better)	PHYS 152 (5) C: MA 166	ENGR 128 (4) P: ENGR 127 C: MA 165, {ENG W131, or COM 114} DC	COM 114 (3) (C or better)		
	Anly. Geometry & Calc. II GenEd A3	Mechanics GenEd B4	Engr. Fundamentals II	Fundament. of Speech GenEd A2		
3rd semester 18 credits	MA 261 (4) P: MA 166 (C- or better)	MA 351 (3) P: MA 166 (C- or better)	PHYS 251 (5) P: PHYS 152 (C or better) C: MA 261	ECE 201 (3) C: MA 261	CS 229 (4) P: ENGR 128	
	Multivariate Calculus	Elem. Linear Algebra	Heat Electricity & Optics	Linear Circuit Anly. I	Intro. to C/C++ Prog.	
4th semester 15 credits	MA 363 (3) P: MA 261 (C- or better) C: MA 351 (C- or better) or current enrollment in MA 351	ECE 202 (3) P: ECE 201 C: MA 363 DC	ECE 255 (3) P: ECE 201 DC	ECE 270 (4) C: ENGR 128 DC	ECE 293 (2) P: ECE 201, ENG W131, COM 114	
	Differential Equations	Linear Circuit Anly. II	Intr. Electron Analy. Des.	Intro. Digitl Sys. Desgn.	Measure. & Instrument.	
5th semester 13 credits	ECE 208 (1) P: ECE 255, ECE 293 DC	ECE 301 (3) P: ECE 202	ECE 324 (3) P: PHYS 251, ECE 255 C: ECE 208 DC	Technical Elective (3)	ME 253 (2) P: MA 261, PHYS 152	ECE 313 (1) C: ECE 324
	Electron. Dev. Des. Lab	Signals & Systems	Intr. Enegy Sys.	Group II	Statics & Dynamics	Energy Conversion Lab
6th semester 13 credits	ECE 302 (3) P: MA 363 C: ECE 301	ECE 311 (3) P: MA 363, PHYS 251	ECE 333 (3) P: ECE 301, ME 253 DC	ECE 362 (4) P: ECE 270, ECE 293, CS 229 DC		
	Probabilistic Methods	Elec. & Magnetic Fields	Automatic Control Sys.	Micropro. Sys & Intrfac.		
7th semester 15 credits	ECE 405 (3) or ENGR 410 (3) P: ECE 208, ECE 301, ECE 362 (and permission of the senior design advisor) DC GenEd C8	ECE 428 (3) P: ECE 301, ECE 302 DC	ECE 436 (3) P: ECE 301 DC	Technical Elective (3) DC	General Education Elective (3)	
	Sr. Engr. Design I	Modern Commun. Syst.	Digital Signal Process.	Group I	GenEd B5	
8th semester 15 credits	ECE 406 (3) or ENGR 411 (3) P: ECE 405 or ENGR 410 DC	Technical Elective (3) DC	Technical Elective (3)	General Education Elective (3)	General Education Elective (3)	
	Sr. Engr. Design II	Group I	Group II	GenEd B6	GenEd B7	

Revised March, 2015

Total Credits: 121