



Electrical Engineering Program Course Outline

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First Year					
Fall Semester			Spring Semester		
Course	Catalog Identification	Credits	Course	Catalog Identification	Credits
Calculus 1	MATH 211	4.0	Calculus 2	MATH 212	4.0
General Chemistry 1	CHEM 170	4.0	Engineering Fundamentals	FENG 102	3.0
Introduction to Engineering	FENG 101	1.0	Computer Programming	FENG 221	3.0
Old Testament Survey	BIBL 123	3.0	Rhetorical Composition	COMP 111	3.0
Ancient & Medieval Cultures	HUMN 101	4.0	Renaissance & Early Mod Cul	HUMN 102	4.0
Semester Credits		16.0	Semester Credits		17.0
Second Year					
Fall Semester			Spring Semester		
General Physics 1	PHYS 203	4.0	General Physics 2	PHYS 204	4.0
Multivariable Calculus	MATH 303	4.0	Linear Algebra	MATH 307	3.0
Technical Elective	TECH αβγ	3.0	Differential Equations	MATH 309	3.0
Applied Electrical Theory 1	EENG 201	3.0	Introduction to Digital Systems	EENG 202	3.0
Inquiring Minds	COMP 211	3.0	New Testament Survey	BIBL 124	3.0
Semester Credits		17.0	Semester Credits		16.0
Third Year					
Fall Semester			Spring Semester		
Applied Math & Prog for Eng	FENG 301	3.0	Analog Devices	EENG 331	3.0
Applied Electrical Theory 2	EENG 301	3.0	Power Systems	EENG 371	3.0
Microcontroller Applications	EENG 361	3.0	Electromagnetics	EENG 451	3.0
Computer Organization	EENG 321	3.0	Systems and Controls	EENG 461	3.0
18 th & 19 th Centuries Cultures	HUMN 201	4.0	Fitness for Life	EXSC 101	1.0
			Cultures of the 20 th /21 st Cent	HUMN 202	4.0
Semester Credits		16.0	Semester Credits		17.0
Fourth Year					
Fall Semester			Spring Semester		
Applied Power and Controls	EENG 471	4.0	Electrical Design Project 2	EENG 482	3.0
Electrical Design Project 1	EENG 481	3.0	Applied Electronics	EENG 431	4.0
Technical Elective	TECH αβγ	3.0	Signals and Systems	EENG 411	3.0
Technical Elective	TECH αβγ	3.0	Technical Elective	TECH αβγ	3.0
FE Exam Preparation	EENG 400	1.0	Christ and Culture	BIBL 471	3.0
Semester Credits		14.0	Semester Credits		16.0
Total Credits All Semesters		129.0	Laptop Requirements		
Total Credits Engineering		67.0	Computer Type	PC (not Mac or Apple)	
Total Credits Math		18.0	Operating System	Windows 10 or higher	
Total Credits Physics		8.0	Memory	8 GB (more is faster)	
Total Credits Chemistry		4.0	Storage	250 GB (SSD is better than HDD)	
			MS Office is free of charge provided through Milligan University		