



Electrical Engineering Program Course Outline

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	Rhetorical Composition	COMP 111	3.0
Intro to College & Service	MLGN 100	0.5	New Testament Survey	BIBL 124	3.0
Old Testament Survey	BIBL 123	3.0	Renaissance & Early Mod Cul	HUMN 102	4.0
Ancient & Medieval Cultures	HUMN 101	4.0			
Total Credits		16.5	Total 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 Elec or Social Elec	MENG CS CIS GER	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	Computer Programming	EENG 221	3.0
			Intro to Calling & Career	MLGN 200	0.5
Total Credits		17.0	Total Credits		16.5
Third Year					
Fall Semester			Spring Semester		
Applied Math & Prog for Eng	FENG 301	3.0	Signals and Systems	EENG 312	3.0
Applied Electrical Theory 2	EENG 301	3.0	Analog Devices	EENG 363	3.0
Microprocessor Applications	EENG 362	3.0	Systems and Controls	MENG 421 & EENG 461	3.0
Computer Engineering 1	EENG 321	3.0	Power Systems	EENG 371	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
Total Credits		16.0	Total Credits		17.0
Fourth Year					
Fall Semester			Spring Semester		
Renewable Energy Systems	EENG 440	3.0	Electromagnetics	EENG 401	3.0
Electrical Design Project 1	EENG 481	3.0	Electrical Design Project 2	EENG 482	3.0
Applied Power and Controls	EENG 471	4.0	Applied Electronics	EENG 431	4.0
Technical Elec or Social Elec	MENG CS CIS GER	3.0	Christ and Culture	BIBL 471	3.0
Speech Communication	COMM 102	3.0	Ethnic Studies	GER	3.0
Total Credits		16.0	Total Credits		16.0
Total Credits All Semesters		132.0	Laptop Requirements		
Total Credits Engineering		60.0	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)	
Total Credits General Education		42.0	MS Office is free of charge provided through Milligan University		