MAJOR IN ELECTRICAL ENGINEERING

(100 credits)

- *Students majoring in Engineering follow a modified General Education program based on the New Paltz GE program in effect at the time of matriculation. In all cases, modifications meet or exceed SUNY's minimum General Education requirement and are reflected in students' progress reports.*

- *A minimum of 124 credits is required to complete the Bachelor's degree in Electrical Engineering.*
- *Students may not enroll in any engineering course unless all prerequisites have been met with a grade of C- or better.*
- *Students are required to earn a grade of C- or better in any course that is used to satisfy Electrical Engineering major requirements.*

Code	Title	Credits
Math/Science Foundation Courses (33 Credits)		
Mathematics (21 credits):		
MAT251	Calculus I	4
MAT252	Calculus II	4
MAT353	Calculus III	4
MAT359	Ordinary Differential Equations	3
MAT362	Linear Algebra	3
MAT380	Applied Probability and Statistics	3
Physics (8 credits):		
PHY201 & PHY211	General Physics 1 and Physics 1 Laboratory	4
PHY202 & PHY212	General Physics 2 and General Physics 2 Lab	4
Chemistry or Biology (4 credits)		
Select one of the following:		4
CHE201 & CHE211	General Chemistry I and General Chemistry I Lab	
BIO201 & BIO211	General Biology I and Gen Bio 1 Lab	
Core Engineering Courses (52 Credits)		
EGG101	Introduction to Engineering Science	3
EGC220	Digital Logic Fundamentals	3
EGC221	Digital Logic Lab	1
EGC251	C/C++ Programming	3
EGE200	Circuit Analysis	3
EGE201	Circuits Laboratory	1
EGE311	Signals and Systems	3
EGE331	Computer Simulation	3
EGE340	Applied Electromagnetics	3
EGC331	Microcontroller System Design	3
EGC332	Microcontroller Laboratory	1
EGE320	Electronics I	3
EGE322	Electronics I Laboratory	1
EGE350	Electric Energy Systems	3
EGE351	Electric Energy Systems Laboratory	1
EGE321	Electronics II	3
EGE323	Electronics II Laboratory	1
EGE416	Control Systems	3
EGM211	Statics	3
or EGM331	Thermodynamics	
EGG321	Technical Communication	3
EGG408	Senior Design Project I [1]	2
EGG409	Sr Design Project 2 [1]	2
Electrical Engineering Technical Electives (15 Credits)		
Fifteen credits of technical electives are required, which must include at least one upper-division electrical (EGE), computer (EGC), and/or mechanical (EGM) engineering lecture course. [2]		15
Total Credits		**100**

[1] Seniors must register for EGG408 Senior Design Project I and EGG409 Sr Design Project 2 during each of the last two semesters preceding their graduation. A single project under the direction of a single faculty member will be spread over two semesters and should provide a meaningful engineering design experience and draw on the student's cumulative technical background.

[2] Technical electives may also include certain upper-division computer science, physics, and math courses. Students must obtain the approval of their advisor prior to registering for the courses. Pre-approved engineering graduate courses may be used as undergraduate technical electives.