State University of New York at New Paltz

This **eight-semester plan** (see important details) is intended to guide a first-year student through a four-year undergraduate career, with completion of an academic major and all college-wide degree requirements. The plan is designed as an **advising tool** – a starting point for careful discussions between a student and his/her academic adviser. In consultation, the student and adviser will adjust the plan to accommodate the student's prerequisite needs, transferred credits, and other such variables.

Students are responsible for reviewing their Progress Reports each semester to track their own progress toward degree requirements.

Computer Engineering

Year 1

Fall Semester		Spring Semester	
Course	**Credits**	**Course**	**Credits**
MAT251 Calculus I (MATH)	4	MAT252 Calculus II	4
CHE201/211 Gen Chem I/Lab OR BIO201/211 Gen Bio I/Lab	4	PHY201 General Physics 1 (NSCI)	3
EGG101 Introduction to Engineering Science	3	PHY211 Physics 1 Laboratory	1
Gen Ed: Composition I (COMP)	3	EGC251 C/C++ Programming	3
Gen Ed: Humanities (HUM)	3	Gen Ed: Composition II (COMP)	3
Total	17	Gen Ed: Social Sciences (SSCI)	3
		Total	17

Year 2

Fall Semester		Spring Semester	
Course	**Credits**	**Course**	**Credits**
MAT359 Ordinary Differential Equations	3	MAT362 Linear Algebra	3
PHY202 General Physics 2 (NSCI)	3	CPS310 Computer Science II: Data Structures	4
PHY212 General Physics 2 Lab	1	EGE200 Circuit Analysis	3
CPS210 Computer Science I: Foundations	4	EGE201 Circuits Laboratory	1
		EGG321 Technical Communication	3
EGC220 Digital Logic Fundamentals	3	Gen Ed: United States Studies (USST)	3
EGC221 Digital Logic Lab	1	**Total**	17
Total	15		

Year 3

Fall Semester	
Course	**Credits**
MAT320 Discrete Mathematics for Computing	3
EGC331 Microcontroller System Design	3
EGC332 Microcontroller Laboratory	1
EGC320 Digital Systems Design	3
EGE320 Electronics I	3
EGE322 Electronics I Laboratory	1
Total	14

Spring Semester	
Course	**Credits**
CPS353 Software Engineering	3
MAT380 Applied Probability and Statistics	3
EGC433 Embedded Systems	3
EGC442 Introduction to Computer Architecture	3
EGC445 VLSI Design	3
EGC446 VLSI Design Lab	1
Total	16

Year 4

Fall Semester	
Course	**Credits**
EGC451 Real-Time Systems	3
EGC455 System-on-Chip (SoC)	3
EGC447 Functional Verfication of Hardware Systems	3
Gen Ed: The Arts (ART)	3
EGG408 Senior Design Project 1 (WI)	3
Total	15

Spring Semester	
Course	**Credits**
Technical Elective	3
Technical Elective	3
EGG409 Senior Design Project 2 (WI)	3
Gen Ed: World Civilizations and Cultures (WRLD)	3
Gen Ed: Western Civilization (WEST)	3
Total	15

Total Credits: 126