## COMPUTER SCIENCE ELECTIVE COURSE LISTS

Courses designated as Core I, II, III, IV or V are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved list.

Students should read the Gallogly College of Engineering Scholastic Regulations posted on the WSSC website.

## **APPROVED C S ELECTIVES**

Code	Title	Credit Hours
C S 4013	Artificial Intelligence	3
C S 4023	Introduction to Intelligent Robotics	3
C S 4033	Machine Learning Fundamentals	3
C S 4053	Computer Graphics	3
C S 4063	Human Computer Interaction	3
C S 4113	Distributed Operating Systems	3
C S 4133	Data Networks	3
C S 4323	Compiler Construction	3
C S 4433	Computational Methods in Discrete Optimization	3
C S 4613	Computer Architecture	3
C S 4743	Scientific Computing I	3
C S 4823	Cryptography	3
C S 4973	Special Topics	3

## **APPROVED technical ELECTIVES**

Code	Title	Hours		
Approved C S Electives Research-Related C S Classes:				
C S 3440	Mentored Research Experience	3		
C S 3960	Honors Reading	1-3		
C S 3980	Honors Research	1-3		
C S 3990	Independent Study	1-3		
C S 4910	Senior Reading and Research	1-3		
All C S 4000+ Courses				
ENGR 4013	Leadership and Management for Engineers	3		
ENGR 4510	Selected Topics	1-6		
ENGR 4003	Engineering Practice	3		
MATH 2443	Calculus and Analytic Geometry IV	3-4		
or MATH 2934	Differential and Integral Calculus III			
All 3000 or 4000 level Mathematics classes				
All 3000 or 4000 level Electrical and Computer Engineering				

## **APPROVED C S Science CLASSES**

Code	Title	Credit Hours
CHEM 1315	General Chemistry	5
CHEM 1415	General Chemistry (Continued)	5
PHYS 1215	Introductory Physics II for Physics Majors	5
PHYS 1311	General Physics Lab I	1

PHYS 2514	General Physics for Engineering and Science Majors	4
BIOL 1013	Introduction to Biology	3
BIOL 1124	Intro Biol: Molecule/Cell/Phys	4
METR 2603	Severe and Unusual Weather	3
GEOL 1033	Earth, Energy, Environment	3
GEOL 1114	Physical Geology for Science and Engineering Majors	4
GEOG 1114	Physical Geography	4
ASTR 1523	Life in the Universe	3

Other classes approved by the C S Undergraduate Committee