

Computer Science Major (Option 3 Computer Networking and Security), B.S. Degree (43-03281)

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog (ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester	Hrs.	Freshman Year - Spring Semester	Hrs.
CS 1100 Computer Programming I	3	CS 1110 Computer Programming II	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	9	Option 3 Major Elective**	3
Semester Total	15	General Education	6
AE 1400 Freshman Seminar*	1	Semester Total	15
Sophomore Year - Fall Semester	Hrs.	Sophomore Year - Spring Semester	Hrs.
CS 2300 Data Structures***	3	CS 2200 Introduction to Computer Organization***	3
CS 2500 C and UNIX Systems Programming***	3	CS 2400 Discrete Structures***	3
MATH 1131 Applied Calculus or		Option 3 Major Elective**	3
MATH 1151 Calculus & Analytic Geometry I	3-5	General Education	6
General Education	6	Semester Total	15
Semester Total	15-17		
Junior Year - Fall Semester	Hrs.	Junior Year - Spring Semester	Hrs.
CS 3200 Computer Architecture***	3	CS 3100 Programming Languages***	3
CS 4300 Algorithm Design & Analysis***	3	CS 4500 Operating Systems***	3
Option 3 Major Elective**	3	Option 3 Major Elective**	3
General Education	6	General Education	6
Semester Total	15	Semester Total	15
Senior Year - Fall Semester	Hrs.	Senior Year - Spring Semester	Hrs.
CS 4600 Database Theory & Applications***	3	CS 4910 Software Engineering***	3
MATH 1300 Basic Statistics or		Option 3 Major Elective**	6
MATH 3311 Introduction to Mathematical Statistics***	3	Free Choice Electives#	4-6
Option 3 Major Elective**	9	Semester Total	13-15
Semester Total	15		

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- *AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- **Option 3 requires a total of 27 hours of major electives: 9-15 hours from set one and 12-18 hours from set two. See the 2013 Undergraduate Catalog for the list of appropriate course choices in each set.
- ***This class is only offered during the semester indicated.
- #The number of free choice electives will depend on the calculus selection made.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.