COMPUTER SCIENCE - BACHELOR OF ARTS

A Suggested Plan of Study For Students

This roadmap assumes student placement in MATH 1220G and ENGL 1110G. The contents and order of this roadmap may vary depending on initial student placement in mathematics and english. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

This roadmap adds the MATH 1511G prerequisites into the plan, MATH 1220G and MATH 1250G will not appear on the requirements tab. Any students who test into MATH 1511G can supplement MATH 1220G and MATH 1250G with elective credits.

Freshman		Credits
CSCI 1110	Computer Science Principles [1]	0-4
ENGL 1110G	Composition I	4
MATH 1220G	College Algebra [2]	3
COMM 1115G	Introduction to Communication	3
CSCI 1720	Computer Science I	0-4
MATH 1511G or MATH 1430G	Calculus and Analytic Geometry I or Applications of Calculus I	4
Area III: Laboratory Science Course [3]		4
Area IV: Social/ Behavioral Sciences Course [3]		3
Electives as needed to meet the minimum credit requirement for financial aid [4]		1-3
	Credits	22-32
Sophomore		
CSCI 2210	Object-Oriented Programming	0-4
CSCI 2230	Assembly Language and Machine Organization	0-4
CSCI 2220	Introduction to Data Structures and Algorithms	0-4
CSCI 2310	Discrete Mathematics for Computer Science	0-4
Area V: Humanities Course [3]		3
Electives Courses as needed to meet minimum credit requirements [4]		5-6
ENGL 2210G	Professional and Technical Communication	3
Electives as needed to meet the minimum credit requirement for financial aid [4]		3
	Credits	14-31
Junior		
CSCI 3730	Compilers and Automata Theory	0-4
CSCI 3710	Software Development	0-4
Either an Area III/IV: Laboratory Science Course or Social/Behavioral Sciences Course [3]		3-4
CSCI elective, List 1 [5]		3
CSCI elective, List 1 [5]		3
Upper division Course from another department		3-4
Viewing a Wider World Course [6]		3
General Education Elective Course [3]		3-4
Select one from the following:		3
MATH 1350G	Introduction to Statistics	
MATH 2350G	Statistical Methods	
STAT 3110	Statistics for Engineers and Scientists	
STAT 4210	Probability: Theory and Applications	
A ST 311	Statistical Applications	
Electives as needed to meet the minimum credit requirement for financial aid [4]		1
	Credits	22-33
Senior		
CSCI 4140	Database Management Systems I	3
CSCI elective, List 1 [5]		3
CSCI elective, List 1 [5]		3
Upper division course from another department		3-4
Viewing a Wider World Course [6]		3
Area VI: Creative and Fine Arts [3]		3
CSCI 4980 or CSCI 4999	Senior Project or Senior Thesis	4
CSCI 4110	Computing Ethics and Social Implications of Computing	1
Upper division electives to bring total upper division to 48 [4]		3-7
Electives as needed to meet the minimum credit requirement for financial aid [4]		4-7
	Credits	30-38
	Total Credits	88-134

[1] Required for students who do not pass MATH 1215 Intermediate Algebra or do not pass the CS placement exam and is not counted towards graduation

[2] MATH 1511G Calculus and Analytic Geometry I is the starting requirement for this degree but students may need to take MATH 1220G College Algebra and MATH 1511G Calculus and Analytic Geometry I before enrolling in it. If a student tests into MATH 1511G Calculus and Analytic Geometry I then elective credits can replace MATH 1220G College Algebra/MATH 1250G Trigonometry & Pre-Calculus in the roadmap.

[3] See the General Education (https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/) section of the catalog for a full list of courses.

[4] Any course offered by the university. Elective credit may vary based on prerequisites, dual credit, AP credit, double majors, and/or minor coursework. The amount indicated in the requirements list is the amount needed to bring the total to 120 credits and may appear in variable form based on the degree. However students may end up needing to complete more or less on a case-by-case basis and students should discuss elective requirements with their advisor.

[5] For electives see List 1 or List 2 of Computer Science electives (p.   ) in Degree Requirement Section.

[6] See the Viewing a Wider World (https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext) section of the catalog for a full list of courses.