

Bachelor of Science in Computer Science with a Concentration in Advanced Computing	
MAJOR REQUIREMENTS/COMPUTER SCIENCE: 51 Credits	Credits
<p>CS-102: Introduction to Computing and Problem Solving 4.0</p> <p>CS-175: Introduction to Computer Science I 4.0</p> <p>CS-176: Introduction to Computer Science II 4.0</p> <p>CS-202: Discrete Math and Applications 4.0</p> <p>CS-286: Computer Architecture I 3.0</p> <p>CS-205: Data Structures and Algorithms 4.0</p> <p>CS-325: Software Engineering Concepts 3.0</p> <p>CS-310: Advanced Object Oriented Programming/Design 4.0</p> <p>CS-432: Database Systems 4.0</p> <p>CS-438: Operating Systems Analysis 4.0</p> <p>CS-490: Senior Project 4.0</p> <p>Take 6 Credits of Computer Science 200+ level: 6.0</p> <p>CS-200+: <u>(See Exceptions*)</u></p> <p>CS-200+: <u>(See Exceptions*)</u></p> <p><i>*Except the following courses: CS-288, CS-388, CS-488, CS-212, CS-222, CS-302, CS-312, CS-316, CS-320, CS-322, and CS-330</i></p> <p>Take 3 Credits of Computer Science 400+ level: 3.0</p> <p>CS-400+: <u>(Except CS488)</u></p>	
REQUIREMENTS OUTSIDE MAJOR: 26 Credits	Credits
<p>MA-125: Calculus with Analytic Geometry I 4.0</p> <p>MA-126: Calculus with Analytic Geometry II 4.0</p> <p>MA-220: Probability and Statistics I 3.0</p> <p>Take 8 credits from ONE of the Following Groups: 8.0</p> <p>CE-111/CE-111L: General Chemistry I/Lab AND</p> <p>CE-112/CE-112L: General Chemistry II/Lab</p> <p>*OR*</p> <p>PH-211/PH-211L: General Physics with Calculus I/Lab AND</p> <p>PH-212/PH-212L: General Physics with Calculus II/Lab</p> <p>*OR*</p> <p>BY-109: Introduction to Biodiversity and Evolution AND</p> <p>BY-110: Introduction to Cell and Molecular Biology</p> <p>Take 4 additional credits (not taken above) from the following courses: 4.0</p> <p>BY-109: Introduction to Biodiversity and Evolution</p> <p>BY-111: Anatomy and Physiology I</p> <p>BY-223: General Microbiology</p> <p>CE-111 and CE-111L: General Chemistry I and Lab</p> <p>CE-220 and CE-220L: Environmental Chemistry and Lab</p> <p>CE-221 and CE-221L: Quantitative Analysis and Lab</p> <p>CE-241 and CE-241L: Organic Chemistry I and Lab</p> <p>PH-211 and PH-211L: General Physics with Calculus I and Lab</p> <p>Take 3 Credits from the following courses: 3.0</p> <p>PH-301, PH-302, BY-201, BY-205, BY-214, BY-220, BY-221, MA-311, MA-318, MA-221, MA-225, or MA-320</p>	
FREE ELECTIVES: 18 Credits	Credits
	18.0

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GENERAL EDUCATION REQUIREMENTS: 33 Credits		Credits
First Year Seminar	FY-101: First Year Seminar	3.0
Reading and Writing	EN101: College Composition I	3.0
	EN102: College Composition II	3.0
Mathematics	Fulfilled in Outside Major Requirements with MA125 or MA126	0.0
Natural Sciences	Fulfilled in Outside Major Requirements with required courses	0.0
Literature	3 Credits from courses designated with Course*Type: LIT	3.0
Aesthetics and Creativity	3 Credits from Art, Music, Theatre, or Dance	3.0
Technological Literacy	Fulfilled in Major Requirements with CS102	0.0
Reasoned Oral Discourse	Fulfilled in Outside Major Requirements with CS490	0.0
Historical Perspective	3 Credits from courses designated with Course*Type: HS.SV	3.0
Social Science	3 Credits from courses designated with Course*Type: SS.SV	3.0
Historical Perspective/Social Sciences	3 Credits from courses designated with Course*Type: HS.SV or 3 Credits from courses designated with Course*Type: SS.SV	3.0
Interdisciplinary Perspectives	3 Credits from courses designated with Course*Type: ISP	3.0
Cultural Diversity and Global Understanding or Foreign Language	3 Credits from courses designated with Course*Type: CD	6.0
	and 3 Credits from courses designated with Course*Type: GU or 6 Credits from the SAME foreign language	
Experiential Education	One course designated with Course*Type: EX	0.0
Writing Intensive	Two courses from Computer Science (CS) designated with Course*Type: WT	0.0
		0.0

Minimum Credits for Bachelor of Science in Computer Science with a Concentration in Advanced Computing = 128.0

NOTES:

* 58 credits must be completed at the 200 level or higher.