

Bachelor of Science in Software Engineering	
MAJOR REQUIREMENTS/SOFTWARE ENGINEERING: 33 Credits	Credits
SE-205: Requirements Engineering and Specifications	3.0
SE-207: Software Design and Architecture	3.0
SE-306: Formal Methods in Software Engineering	3.0
SE-312: Software Verification, Validation, and Maintenance	3.0
SE-351: Microprocessor Laboratory	3.0
SE-357: Engineering Web-based Systems	3.0
SE-402: Human-Computer Interaction	3.0
SE-403: Software Process Improvement	3.0
SE-418: Software Project Management	3.0
PRACTICUM:	
SE-485A: Software Practicum	3.0
SE-485B: Software Practicum	3.0
INTERDISCIPLINARY REQUIREMENTS: 63 Credits	Credits
BE-201: Microeconomics	3.0
BM-250: Principles of Management and Organizational Behavior	3.0
CS-104: Introduction to Problem Solving and Software Development	3.0
CS-175: Introduction to Computer Science I	3.0
CS-175L: Introduction to Computer Science I Lab	1.0
CS-176: Introduction to Computer Science II	3.0
CS-176L: Introduction to Computer Science II Lab	1.0
CS-205: Data Structures and Algorithms	3.0
CS-205L: Data Structures and Algorithms Lab	1.0
CS-286: Computer Architecture I	3.0
CS-438: Operating Systems Analysis	3.0
MA-130: Applied Discrete Mathematics	3.0
MA-125: Calculus with Analytic Geometry I	4.0
MA-126: Calculus with Analytic Geometry II	4.0
MA-220: Probability and Statistics I	3.0
PH-211: General Physics with Calculus I	4.0
PH-211L: General Physics with Calculus I Lab	1.0
PH-212: General Physics with Calculus II	4.0
PH-212L: General Physics with Calculus II Lab	1.0
IT-450: Information Systems Project Management	3.0
Take 3 Credits from the Following Courses:	3.0
PR-407: Morality and Community	
PR-432: Ethics and Professionalism in Science and Engineering	
PR-449: The Helping Professions	
PR-457: Issues in Cognitive Science	
PR-460: How Technology Affects Values	
Take 6 Credits from the Following Math/Science Courses:	6.0
MA-311: Differential Equations	
MA-221: Linear Algebra	
MA-225: Calculus with Analytic Geometry III	
MA-318: Combinatorics and Graph Theory	
MA-320: Probability and Statistics II	
<i>*Lab course is 1 credit</i> CE-111 and CE-111L*: General Chemistry I and Lab*	
<i>*Lab course is 1 credit</i> CE-112 and CE-112L*: General Chemistry II and Lab*	
BY-109: Introduction to Biodiversity and Evolution	
BY-110: Introduction to Cell and Molecular Biology	
PH-301: Modern Physics	
PH-302: Theoretical Physics	
FREE ELECTIVES: 5 Credits	Credits
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GENERAL EDUCATION REQUIREMENTS: 27 Credits		Credits
First Year Seminar	FY-101: First Year Seminar	3.0
Reading and Writing	EN-101: College Composition I	3.0
	EN-102: College Composition II	3.0
Mathematics	Fulfilled in Interdisciplinary Requirements with required MA courses	0.0
Natural Sciences	Fulfilled in Interdisciplinary Requirements with required PH 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 Interdisciplinary Requirements with CS-104	0.0
Reasoned Oral Discourse	Fulfilled in Major Requirements with SE-485A or SE-485B	0.0
Historical Perspective	3 Credits from courses designated with Course*Type: HS.SV	3.0
Social Science	Fulfilled in Interdisciplinary Requirements with BE-201	0.0
Historical Perspective/Social Sciences	3 Credits from courses designated with Course*Type: HS.SV	3.0
	or 3 Credits from courses designated with Course*Type: SS.SV	
Interdisciplinary Perspectives	Fulfilled in Interdisciplinary Requirements with required PR course	0.0
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	Fulfilled in Major Requirements with SE-485B	0.0
Writing Intensive	Two courses from Software Engineering (SE) designated with Course*Type: WT	0.0
		0.0

Minimum Credits for Bachelor of Science in Software Engineering = 128.0

NOTES:

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