

Bachelor of Science in Software Engineering

MAJOR REQUIREMENTS/SOFTWARE ENGINEERING: 36 Credits

Credits

SE104: Introduction to Software Engineering	3.0
SE205: Requirements Engineering and Specifications	3.0
SE207: Software Design and Architecture	3.0
SE306: Formal Methods in Software Engineering	3.0
SE312: Software Verification, Validation, and Maintenance	3.0
SE402: Human-Computer Interaction	3.0
SE403: Software Process Improvement	3.0
SE418: Software Project Management	3.0

Take 6 Credits in Software Engineering:

SE-xxx: _____	3.0
SE-xxx: _____	3.0

PRACTICUM:

SE485A: Software Practicum	6.0
SE485B: Software Practicum	

REQUIREMENTS OUTSIDE MAJOR: 65 Credits

Credits

BE201: Microeconomics	3.0
BM250: Principles of Management and Organizational Behavior	3.0
BM311: Management of Information Systems	3.0

CS102: Introduction to Computing and Problem Solving	4.0
CS175: Introduction to Computer Science I	4.0
CS176: Introduction to Computer Science II	4.0
CS286: Computer Architecture I	3.0
CS205: Data Structures and Algorithms	4.0
CS438: Operating Systems Analysis	4.0

MA130: Applied Discrete Mathematics	3.0
MA125: Calculus with Analytic Geometry I	4.0
MA126: Calculus with Analytic Geometry II	4.0
MA319: Probability and Statistics I	3.0
PR432: Ethics and Professionalism in Science and Engineering	3.0

PH211: General Physics with Calculus I	4.0
PH211L: General Physics with Calculus I Lab	1.0
PH212: General Physics with Calculus II	4.0
PH212L: General Physics with Calculus II Lab	1.0

Take 6 credits from the following Math/Science Courses:

MA211: Differential Equations	6.0
MA221: Linear Algebra	
MA225: Calculus with Analytic Geometry III	
MA320: Probability and Statistics II	
CE111 and CE111L*: General Chemistry I and Lab*	
CE112 and CE112L*: General Chemistry II and Lab*	
BY109: Introduction to Biodiversity and Evolution	
BY110: Introduction to Cell and Molecular Biology	
PH301: Modern Physics	
PH302: Applied Physics	

**Lab courses are 1 credit each*

Bachelor of Science in Software Engineering		
GENERAL EDUCATION REQUIREMENTS: 27 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 required MA courses	0.0
Natural Sciences	Fulfilled in Outside Major 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 Outside Major Requirements with CS102	0.0
Reasoned Oral Discourse	Fulfilled in Major Requirements with SE485A or SE485B	0.0
Historical Perspective	3 Credits from courses designated with Course*Type: HS.SV	3.0
Social Science	Fulfilled in Outside the Major Requirements with BE201	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 Outside Major Requirements with PR432	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 SE485B	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.