2015

B.S. in Software Engineering 2015 curriculum

Nova Southeastern University

FARQUHAR COLLEGE OF ARTS AND SCIENCES
DEGREE CURRICULUM SHEET | 2015 CATALOG
Bachelor of Science - Software Engineering

GENERAL EDUCATION REQUIREMENTS		
Area/Course	**Credits**	**Frequency**
Written Composition		
6 credits at or above COMP 1500		
Open Written Communication	3	
Open Written Communication	3	
Mathematics		
6 credits at or above MATH 1040		
satisfied by Major	3	
satisfied by Major	3	
Arts & Humanities		
6 credits in HIST, ARTS, PHIL, HUMN, LITR, THEA, FILM, MUSC, DANC, WRIT, foreign language		
Open Arts & Humanities	3	
Open Arts & Humanities	3	
Social & Behavioral Sciences		
6 credits in PSYC, SOCL, ANTH, ECN, COMM, GEOG, GEST, INST, POLS		
Open Social & Behavioral Sciences	3	
Open Social & Behavioral Sciences	3	
Science		
6 credits in BIOL, MBIO, CHEM, SCIE, ENVS, PHYS		
satisfied by Major	3	
satisfied by Major	3	
Total General Education Credits	**30**	

OPEN ELECTIVES		
take 3 elective credits	9	
Total Open Electives Credits	**9**	

MAJOR ELECTIVES		
Select 9 credits from any 3000/4000-level CSIS, CENG, MATH, or SENG course not listed above.	9	
Total Major Elective Credits	**9**	

MAJOR		
Course	**Credits**	**Frequency**
Mathematics and Basic Sciences		
MATH 2100 Calculus I	4	FW
MATH 2200 Calculus II	4	FW
MATH 3300 Introductory Linear Algebra	3	FW
MATH 4500 Probability and Statistics	3	F
Any two BIOL/CHEM/PHYS with lab courses	8	FW
Computer Science and Information Systems		
CSIS 1800 Introduction to Computer and Information Sciences	3	FW
CSIS 2000 Introduction to Database Systems	3	F
CSIS 2050 Discrete Mathematics	3	FW
CSIS 2101 Fundamentals of Computer Programming	4	FW
CSIS 3020 Web Programming and Design	3	F
CSIS 3023 Legal and Ethical Aspects of Computers	3	F
CSIS 3101 Advanced Computer Programming	4	FW
CSIS 3400 Data Structures	4	FW
CSIS 3460 Object Oriented Design	3	FW
CSIS 3500 Networks and Data Communication	3	F
CSIS 3750 Software Engineering	4	W
CSIS 3810 Operating Systems Concepts	3	FW
CSIS 4610 Design and Analysis Algorithms	3	W
Technology		
TECH 4350 Human-Computer Interaction	3	W
Software Engineering		
SENG 4100 Software Development Processes and Quality	3	F
SENG 4110 Measurement and Verification of Software	3	F
SENG 4750 Software Construction Technologies and Methods	3	F
SENG 4800 Software Architecture, Modeling, and Analysis	4	W
SENG 4900 Senior Capstone Design	3	W
Total Major Credits	**84**	

Frequency Key: F-Every Fall; W-Every Winter; FO - Odd Year Fall; FE - Even Year Fall; WO - Odd Year Winter; WE - Even Year Winter

TOTAL CREDITS: 120

last modified 8.2014

FARQUHAR COLLEGE OF ARTS AND SCIENCES
SAMPLE FOUR YEAR CURRICULUM | 2015 CATALOG
Bachelor of Science - Software Engineering

Freshman Year			
Fall		**Winter**	
Course	Credits	Course	Credits
Open Written Communication	3	Open Written Communication	3
MATH 2100 Calculus I	4	Open Arts & Humanities	3
CSIS 1800 Introduction to Computer and Info. Sciences	4	MATH 2200 Calculus II	4
CSIS 2101 Fundamentals of Computer Programming	3	CSIS 3101 Advanced Computer Programming	4
Total Credits	**14**	**Total Credits**	**14**
Sophomore Year			
Fall		**Winter**	
Course	Credits	Course	Credits
Any BIOL/CHEM/PHYS with lab course	4	Open Arts & Humanities	4
CSIS 2000 Introduction to Database Systems	3	Any BIOL/CHEM/PHYS with lab course	3
CSIS 2050 Discrete Mathematics	3	CSIS 3400 Data Structures	4
CSIS 3500 Networks and Data Communication	3	CSIS 3460 Object Oriented Design	3
Open Elective	3		
Total Credits	**16**	**Total Credits**	**14**
Junior Year			
Fall		**Winter**	
Course	Credits	Course	Credits
Open Social & Behavioral Sciences	3	Open Social & Behavioral Sciences	3
CSIS 3020 Web Programming and Design	3	CSIS 3750 Software Engineering	4
CSIS 3023 Legal and Ethical Aspects of Computers	3	CSIS 3810 Operating Systems Concepts	3
MATH 3300 Introductory Linear Algebra	3	TECH 4350 Human-Computer Interaction	3
Major Elective	3	Open Elective	3
Total Credits	**15**	**Total Credits**	**16**
Senior Year			
Fall		**Winter**	
Course	Credits	Course	Credits
SENG 4100 Software Dev. Processes and Quality	3	CSIS 4610 Design and Analysis Algorithms	3
SENG 4110 Measurement & Verification of Software	3	SENG 4800 Soft. Architecture, Modeling, & Analysis	4
SENG 4750 Software Construction Technologies & Methods	3	SENG 4900 Senior Capstone Design	3
MATH 4500 Probability and Statistics	3	Major Elective	3
Major Elective	3	Open Elective	3
Total Credits	**15**	**Total Credits**	**16**

TOTAL CREDITS: 120

NOTE: This sample plan is based on the student beginning at least at the level of MATH 2100: Calculus I. The plan will need to be adjusted for students who begin at a lower level.