Undergraduate Programs Course Catalogs   NSU Course Catalogs and Course Descriptions

2015

B. S. in Computer Science 2015 curriculum

Nova Southeastern University

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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**	

MAJOR PREREQUISITES

Course	Credits	Frequency
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
PHYS 2400 Physics I/Lab	4	FW
PHYS 2500 Physics II/Lab	4	FW
Total Major Prerequisite Credits	**22**	

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

MAJOR

Course	Credits	Frequency
CSIS 1800 Introduction to Computer and Info. Sciences	3	FW
CSIS 2050 Discrete Mathematics	3	FW
CSIS 2101 Fundamentals of Computer Programming	4	FW
CSIS 3023 Legal and Ethical Aspects of Computers	3	F
CSIS 3050 Assemblers and Assembly Lang. Programming	4	W
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 4050 Computer Architecture	3	W
CSIS 4600 Systems Programming	4	F
CSIS 4610 Design and Analysis Algorithms	3	W
Capstone		
CSIS 4903 Capstone Project for Computer Science *or*	3	W
CSIS 4953 Capstone Internship in Computer Science	3	W
Total Major Credits	**51**	

MAJOR ELECTIVES

Course	Credits	Frequency
Select 9 credits from the following:		
Any CSIS, CENG, EENG, or SENG courses of level 3000 or higher that is not listed above, provided the student has satisfied the prerequisites.	3	
MATH 3260 Combinatorics	3	WE
MATH 3350 Number Theory	3	WO
MATH 4350 Abstract Algebra I	3	FO
MATH 4700 Applied Cryptography	3	WE
Total Major Elective Credits	**9**	

OPEN ELECTIVES

	Credits	
take 20 elective credits	20	
Total Open Electives Credits	**20**	

TOTAL CREDITS: 120

Freshman Year			
Fall		**Winter**	
Course	Credits	Course	Credits
Open Written Communication	3	Open Written Communication	3
CSIS 1800 Introduction to Computer and Info. Sciences	3	CSIS 3101 Advanced Computer Programming	4
CSIS 2050 Discrete Mathematics	3	MATH 2100 Calculus I	4
CSIS 2101 Fundamentals of Computer Programming	4	Open Elective	3
Total Credits	**13**	**Total Credits**	**14**

Sophomore Year			
Fall		**Winter**	
Course	Credits	Course	Credits
Open Arts & Humanities	3	Open Arts & Humanities	3
Open Social & Behavioral Sciences	3	Open Social & Behavioral Sciences	3
CSIS 3500 Networks and Data Communication	3	CSIS 3050 Assemblers and Assembly Lang. Programmi	4
MATH 2200 Calculus II	4	CSIS 3400 Data Structures	4
Open Elective	3	Open Elective	3
Total Credits	**16**	**Total Credits**	**17**

Junior Year			
Fall		**Winter**	
Course	Credits	Course	Credits
MATH 3300 Introductory Linear Algebra	3	CSIS 3750 Software Engineering	4
CSIS 3023 Legal and Ethical Aspects of Computers	3	CSIS 4050 Computer Architecture	3
CSIS 3810 Operating Systems Concepts	3	PHYS 2500 Physics II/Lab	4
PHYS 2400 Physics I/Lab	4	Open Elective	3
Open Elective	3		
Total Credits	**16**	**Total Credits**	**14**

Senior Year			
Fall		**Winter**	
Course	Credits	Course	Credits
CSIS 3460 Object Oriented Design	3	CSIS 4610 Design and Analysis Algorithms	3
CSIS 4600 Systems Programming	4	Capstone Course	3
MATH 4500 Probability and Statistics	3	Major Elective	3
Major Elective	3	Major Elective	3
Open Elective	2	Open Elective	3
Total Credits	**15**	**Total Credits**	**15**

TOTAL CREDITS: 120