

COMPUTER SCIENCE - SOFTWARE DEVELOPMENT OPTION, BACHELOR OF SCIENCE

Becky Cunningham, Program Director
Corley Hall, Room 233
(479) 880-4610, ext 4462
rcunningham@atu.edu

Curriculum

Course	Title	Hours	Completed
Freshman			
Fall			
ENGL 1013	Composition I	3	_____
COMS 1333	Web and Mobile Technologies	3	_____
CSEC 1003	Introduction to Cybersecurity	3	_____
MATH 2914	Calculus I	4	_____
TECH 1001	Orientation to the University ^{1,2}	1	_____
Hours		14	
Spring			
COMS 1011 & COMS 1013	Programming Foundations I Lab and Programming Foundations I	4	_____
CSEC 1113	Introduction to Networking	3	_____
ENGL 1023	Composition II	3	_____
MATH 2924	Calculus II	4	_____
Hours		14	
Sophomore			
Fall			
COMS 2203	Programming Foundations II	3	_____
COMS 2323	Programming in Python	3	_____
COMS 2703	Computer Hardware and Architecture	3	_____
MATH 2703	Discrete Mathematics	3	_____
SS 1XXX	Social Science Courses ¹	3	_____
Hours		15	
Spring			
COMM 2173	Business and Professional Speaking ₃	3	_____
COMS 2013	AI Fundamentals	3	_____
COMS 2213	Data Structures	3	_____
COMS 2223	Computer Organization and Programming	3	_____
SCIL 1XXX	Science with Laboratory ¹	4	_____
Hours		16	
Junior			
Fall			
COMS 2163	Scripting Languages	3	_____
COMS 3213	Algorithm Design and Analysis	3	_____
COMS 3703	Advanced Operating Systems	3	_____
FAH 1XXX	Fine Arts and Humanities Courses ¹	3	_____
STAT 3153	Applied Statistics	3	_____
Hours		15	

Spring

COMS 3053	Ethical Issues in Technology	3	_____
COMS 3233	Database Design and Implementation	3	_____
COMS 3313	Software Engineering	3	_____
MATH 4003	Linear Algebra I	3	_____
SCIL 1XXX	Science with Laboratory ¹	4	_____
Hours		16	

Senior**Fall**

COMS 4103	Organization of Programming Languages	3	_____
COMS 4913	Capstone I	3	_____
FAH 1XXX	Fine Arts and Humanities Courses ¹	3	_____
USHG 1XXX	U.S. History and Government ¹	3	_____
Approved Elective (3000-4000 level)		3	_____
Hours		15	

Spring

COMS 4413	Parallel and Distributed Computing	3	_____
COMS 4923	Capstone II	3	_____
SS 1XXX	Social Science Courses ¹	3	_____
Approved Elective (3000-4000 Level)		6	_____
Hours		15	
Total Hours		120	

¹ See appropriate alternatives or substitutions in "General Education Requirements (<https://catalog.atu.edu/undergraduate/general-education-requirements/>)."

² TECH 1013 Introduction to the University is a substitution for TECH 1001 Orientation to the University.

³ COMM 2003 Public Speaking is a substitution for COMM 2173 Business and Professional Speaking.