

# COMPUTER SCIENCE, BACHELOR OF SCIENCE

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## Curriculum

Course	Title	Hours	Completed
<b>Freshman</b>			
<b>Fall</b>			
ENGL 1013	Composition I <sup>1</sup>	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 <sup>2</sup>	1	_____
<b>Hours</b>		<b>14</b>	
<b>Spring</b>			
COMS 1011 & COMS 1013	Programming Foundations I Lab and Programming Foundations I	4	_____
CSEC 1113	Introduction to Networking	3	_____
ENGL 1023	Composition II <sup>1</sup>	3	_____
MATH 2924	Calculus II	4	_____
<b>Hours</b>		<b>14</b>	
<b>Sophomore</b>			
<b>Fall</b>			
COMM 2173	Business and Professional Speaking <sup>3</sup>	3	_____
COMS 2203	Programming Foundations II	3	_____
COMS 2703	Computer Hardware and Architecture	3	_____
MATH 2703	Discrete Mathematics	3	_____
SS 1XXX	Social Science Courses <sup>1</sup>	3	_____
<b>Hours</b>		<b>15</b>	
<b>Spring</b>			
COMS 2163	Scripting Languages	3	_____
COMS 2213	Data Structures	3	_____
COMS 2223	Computer Organization and Programming	3	_____
ENGL 2053	Technical Writing	3	_____
SCIL 1XXX	Science with Laboratory <sup>1</sup>	4	_____
<b>Hours</b>		<b>16</b>	
<b>Junior</b>			
<b>Fall</b>			
COMS 2323	Programming in Python	3	_____
COMS 3213	Algorithm Design and Analysis	3	_____
COMS 3703	Advanced Operating Systems	3	_____
FAH 1XXX	Fine Arts and Humanities Courses <sup>1</sup>	3	_____
Approved Elective (3000-4000 level)		3	_____
<b>Hours</b>		<b>15</b>	
<b>Spring</b>			
COMS 3053	Ethical Issues in Technology	3	_____

COMS 3233	Database Design and Implementation	3	_____
COMS 3313	Software Engineering	3	_____
SCIL 1XXX	Science with Laboratory <sup>1</sup>	4	_____
Approved Elective (3000-4000 level)		3	_____
<b>Hours</b>		<b>16</b>	
<b>Senior</b>			
<b>Fall</b>			
COMS 4103	Organization of Programming Languages	3	_____
COMS 4913	Capstone I	3	_____
FAH 1XXX	Fine Arts and Humanities Courses <sup>1</sup>	3	_____
STAT 3153	Applied Statistics	3	_____
USHG 1XXX	U.S. History and Government <sup>1</sup>	3	_____
<b>Hours</b>		<b>15</b>	
<b>Spring</b>			
COMS 4413	Parallel and Distributed Computing	3	_____
COMS 4923	Capstone II	3	_____
MATH 4003	Linear Algebra I	3	_____
SS 1XXX	Social Science Courses <sup>1</sup>	3	_____
Approved Elective (3000-4000 level)		3	_____
<b>Hours</b>		<b>15</b>	
<b>Total Hours</b>		<b>120</b>	

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

<sup>2</sup> TECH 1013 Introduction to the University is a substitution for TECH 1001 Orientation to the University.

<sup>3</sup> COMM 2003 Public Speaking is a substitution for COMM 2173 Business and Professional Speaking.