Bachelor of Arts in Applied Computer Science



This is a GATED PROGRAM

Catalog Year: 2015-2016

Total Degree Credit hours: 120

General Education Requirements (See DegreeWorks or catalog for prerequisites)

A-1	ENGL 1101 Composition I	3	
	ENGL 1102 Composition II	3	
A-2	MATH 1113 Pre-Calculus or	3	
	MATH 1112 College Trigonometry		

B-1	ECON 1000 Contemporary Economic Issues	2	
B-2	FL 1002 Intro to Foreign Lang I or COM	2	
	1100 Human Communication	5	

C-1	ENGL 2000-level Literature	3	
C-2	ART/DANC/MUSI/TPS 1107	3	
	Arts and Culture of the World		

D-1	MATH 1190 Calculus I	4	
D-2	CHEM 1211/L or PHYS 1111/L or PHYS	8	
	2211/L or BIOL 1107/L		
	CHEM 1212/L or PHYS 1112/L or PHYS		
	2212/L or BIOL 1108/L		

E-1	POLS 1101 American Government	3	
E-2	HIST 2111/2112 US History	3	
E-3	HIST 1100/1111/1112 World History	3	
E-4	CRJU/GEOG/PSYC/SOCI/STS 1101, ANTH	2	
	1102 or ECON 2100	5	

Area A: Essential Skills 9 credit hours

Must complete all three requirements in this area within first 30 credit hours.

Students must have C or better on all classes in this area.

Area B: Institutional Options 5 credit hours If you take COM 1100 you must still complete the FL 1002 before taking FL 2001 in Area F, unless you test into FL 2001 or obtain CLEP credit for FL 1002.

Area C: Humanities/Arts 6 credit hours

Choose one course from both groups.

Area D: Science, Math & Technology 11 credit hours

Must complete a science sequence. "L" denotes accompanying lab section.

Area E: Social Sciences

12 credit hours

Choose one course from each group for requirements E-2 to E-4.

Free Electives (3-6 credit hours)

CSE 1300 is <u>highly recommended</u> for students new to programming.

Area F Lower Division Major Requirements (18 credit hours)

		Frerequisites (Lieun	15
F-1	ACST 2301 Problem Solving and Computer Game Programming	No Prereq	3	
F-2	CSE 1321/L Programming and Problem Solving I w/lab	CSE 1300 or MATH 1112/1113/1190	4	
F-3	STAT 1401 Introduction to Statistics	MATH 1111		
F-4	FL 2001 Intermediate Foreign Lang I	FL 1002	3	
F-5	FL 2002 Intermediate Foreign Lang II	FL 2001	3	
F-6	IS 2200 Info Systems and Communication	ENGL 1101 & (MATH 1111 or higher)	3	

Submit a change of major request after earning a 'B' or better in CSE 1322/L.

*MATH prerequisite could also be MATH 1112 or MATH 1190.

Students must have a C or better on all courses included in Area F and a B or better for CSE 1321/L and CSE 1322/L

	Prerequisites	Credits	5
ACST 3150 Programming with .NET Framework	ACST 2301		
CSE 1322/L Programming & Problem Solving II w/lab	'B' or better in CSE 1321/L	4	
IS 3260 Web Development I	IS 2200 & Permission from Coles	3	
CS 3410 Introduction to Database Systems	CSE 1322/L*	3	
ACST 3330 Data Structures and DB Applications	CSE 1322/L*	3	
ACST 3540 Social Media and Global Computing	CSE 1322/L*	3	
ACST 3510 Computer Architecture from Foundations to Cloud	CSE 1322/L*	3	
ACST 3530 Linux Operating Systems	ACST 3510	3	
ACST 3710 Digital Game Design & Team Project	CSE 1322/L*	3	
ACST 4620 Computing Security	ACST 3530	3	
CS 4850 Senior Project	Permission from Advising	3	

Upper Division Major Courses (31 credit hours)

Students must have a C or better in all Upper Division courses.

*Students may need an override from CCSE Advising if they've taken ACST 2312 instead.

Required Minor or Concentration

Choose 1:
Applied Mathematics
Applied Statistics & Data Analysis
Business Information Systems
Information Security & Assurance
Chemistry

Major Electives

	Prerequisites	Credits	
ACST 3720 Process and Systems Modeling	ACST 3710	3	
ACST 4320 Data Warehousing and Mining	ACST 3330	4	
ACST 4550 Mobile Computing with Android	ACST 3150	3	
ACST 4570 Cloud Computing	ACST 3530	3	
CSED 4416 Teaching of Computer Science	CS 2302 & IT 2101	3	
IS 3760 Web Development II	IS 3260 & Permission from Coles	3	
SWE 3313 Introduction to Software Engineering	CSE 1322/L	3	