

Bachelor of Arts in Applied Computer Science

Catalog Year: 2015-2016

General Education Requirements (See DegreeWorks for prerequisites)

A-1	ENGL 1101 Composition I	3	
	ENGL 1102 Composition II	3	
A-2	MATH 1113 Pre-Calculus	4	

Area A: Essential Skills (9 credit hours)

Must complete this area within first 30 credit hours.

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

B-1	ANTH/GEOG/PSYC/SOCI/CRJU/STS 2105 Social Issues	2	
B-2	FL 1002 Intro to Foreign Lang I or COM 1100 Human Communication	3	

Area B: Institutional Options (5 credit hours)

Choose one course from area B-1.

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

Area C: Humanities/Arts (6 credit hours)

Choose one course from both groups.

D-1	MATH 1190 Calculus I	4	
D-2	CHEM 1211/L or PHYS 2211/L	8	
	CHEM 1212/L or PHYS 2212/L		

Area D: Science, Math & Technology (12 credit hours)

Must complete a science sequence. Either General Chemistry or Principles of Physics. "L" denotes accompanying lab course.

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	ECON 1100/2100 Economics	3	

Area E: Social Sciences (12 credit hours)

Choose one course from groups E-2 to E-4.

KSU 1101/1111/1121/1200 First Year Seminar	3	
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Area F Lower Division Major Requirements

Prerequisites			
F-1	ACST 2301 Problem Solving and Computer Game Programming	No Prerequisite	3
F-2	IS 2200 Info Systems and Communication	ENGL 1101, MATH 1111/1112/1113	3
F-3	MATH 1107 Elementary Statistics	MATH 1112 or 1113	3
F-4	CS 1301 Programming Principles I	MATH 1112 or 1113	4
F-5	FL 2001 Intermediate Foreign Lang I	FL 1002	3
F-6	FL 2002 Intermediate Foreign Lang II	FL 2001	3

Students should begin ACS 2301 within their first or second semester in the major.

Student may wish to take the Department of Foreign Languages computerized adaptive placement exam to determine proper placement into the appropriate starting level language course. Students who place at a lower level (1001/1002) must work their way up to FL 2001 and FL 2002.

Students must have a C or better on all courses included in Area F.

Notes:

Upper Division Major Courses

	Prerequisites		
ACST 3150 Programming with .NET Framework	CS 1301	4	
IS 3260 Web Development I	IS 2200 & permission of Coles College	3	
CS 3410 Intro to Database Systems	CS 1301 & ACS 3150	3	
ACST 3510 Computer Architecture & Robotics	ACST 2301	3	
ACST 3530 Linux Operating Systems	ACST 3510	3	
ACST 3330 Data Structures and Database Applications	ACST 3310	3	
ACST 3540 Social Media & Global Computing	ACST 3150	3	
ACST 3710 Digital Game Design	ACST 3150	3	
ACST 4550 Mobile Computing with Android	ACST 3530	3	
ACST 4620 Computing Security	ACST 3530	3	
CS 4810 Senior Project	Department Approval	3	

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

Required Minor or Concentration (15 hours)

Select one minor or concentration from this list, or as approved by the CS Department.

Applied Mathematics Minor	Chemistry Minor
Mathematics of Computing Certificate	Information Security & Assurance Minor
Applied Stats & Data Analysis Minor	Geographical Information Systems Concentration
Business Information Systems Minor	High Performance Computing Certificate

Students must have a C or better in all formal minor/ concentration courses.

Major Electives

Choose any 6 credit hours

	Prerequisites		
CSED 4416 Teaching of Computer Science	Department Approval	3	
ACST 3720 Process and Systems Modeling	ACST 3710	3	
ACST 4320 Data Warehousing & Mining	ACST 3330	3	
ACST 4570 Cloud Computing	ACST 3530	3	
IS 3760 Web Development II	IS 3260 & permission from Coles College	3	
Or other approved substitution		3	

Students must have a C or higher in all Major Electives.

Free Electives	Total = 1-4 hrs
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