# **Bachelor of Arts in Applied Computer Science**



Updated 5/7/2019

#### This is a GATED PROGRAM

Catalog Year: 2019 Total Degree Credit hours: 120

### General Education Requirements (See DegreeWorks or catalog for prerequisites)

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

B-1	ECON 1000 Contemporary Economic Issues	2	
B-2	FL 1002 Intro to Foreign Lang I or COM	2	
	1100 Human Communication	3	

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

D-1	MATH 1190 Calculus I	4	
	CHEM 1211/L	8	
D-2	CHEM 1212/L or BIOL 1107/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	3	

#### 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

"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.

# **Area F Lower Division Major Requirements (18 credit hours)**

Students must complete CSE 1321/L and CSE 1322/L with a 'B' or better to be admitted to this major.

#### Prerequisites

F-1	CSE 1321/L Programming and Problem Solving I w/lab	Co-req: MATH 1112/1113/1190 or CSE 1300	4	
F-2	CSE 1322/L Programming and Problem Solving II w/lab	'B' or better in CSE 1321/L	4	
F-4	FL 2001 Intermediate Foreign Lang I	FL 1002	3	
F-5	FL 2002 Intermediate Foreign Lang II	FL 2001	3	
F-3	CSE 2300 Discrete Structures for Computing OR MATH 2345 Discrete Mathematics	CSE 1321/L & MATH 1113*  MATH 1113*	3	

It is recommended for students to take CSE 1300 Intro to Computing Principles if they do not have any background or experience in computer programming, and should do CSE 1321/L in the following semester.

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.

+ 1 hr from STAT 1401

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

### **Additional Requirements (8 credit hours)**

### Prerequisites

STAT 1401 Introduction to Statistics	MATH 1111 or higher	3	
MATH 2332 Probability and Data Analysis	MATH 1190	3	
STAT 3010 Computer Applications of Statistics	STAT 1401	3	

Students must have a C or better in these courses

## **Upper Division Major Courses (33 credit hours)**

	Prerequisites		
CSE 3203 Overview of Mobile Systems	CSE 1322/L	3	
CS 3410 or CSE 3153 Database Systems	CSE 1322/L	3	
ACST 3330 Data Structures and DB Applications	CSE 1322/L	3	
ACST 3340 Modern Languages: Theory, Scripting, R, HPC, Fortran	ACST 3330	3	
ACST 3510 Computer Architecture from Foundations	CSE 1322/L	3	
to Cloud	001 1012/1	-	
ACST 3530 Linux Operating Systems	ACST 3510	3	
ACST 3710 Digital Game Design & Team Project	CSE 1322/L	3	
ACST 3540 Social Media & Global Computing	CSE 1322/L	3	
ACST 4620 Computing Security	ACST 3530	3	
ACST 4850 Interdisciplinary Project & Portfolio	ACST 3340	4	
+ 2 hours from General Education (M/	ATH 1190 and D-2 La	b cre	edit)

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

### **Interdisciplinary Concentration (15-18 hours)**

Must have C or better in all courses in the concentration.

Please see advisor or coordinator to discuss courses in concentration.

Students may propose an alternative concentration/minor. Must have coordinator approval.

Data Mining, Applied Statistics, and HPC	
High Performance Computing (HPC)	
Applied Computing	
Computing and Information Systems	
Computing and the Sciences	

After choosing your concentration, please fill in this table to mark progress. Concentration courses and their prerequisites may be found by going to http://ccse.kennesaw.edu/advising/baacs\_concentrations.php

Concentration Courses	Prerequisites	Credits	

### Free Electives (1-4 hours)

Free electives are fulfilled with any college credit not already utilized in the degree program. KSU 1101 and CSE 1300 are considered free electives. **CSE 1300** is <u>highly recommended</u> for students who are new to programming and have available free elective credits to complete.