Bachelor of Arts in Applied Computer Science



Catalog Year: 2018

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 MATH 1112 | ſ | |
| | 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 | |

| | ENGL 2000-level Literature | З | |
|--|-------------------------------|---|--|
| | ART/DANC/MUSI/TPS 1107 | 0 | |
| | Arts and Culture of the World | э | |

| D-1 | MATH 1190 Calculus I | 4 | |
|-----|----------------------------|---|--|
| | CHEM 1211/L | • | |
| D-2 | CHEM 1212/L or BIOL 1107/L | ð | |

| 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 | |

| KSU 1101 First Year Seminar (Free Elective) | 3 | |
|--|---|--|
| CSE 1300 Intro to Computing Principles (Free | 3 | |
| Elective) | З | |

Area A: Essential Skills

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

12 credit hours

9 credit hours

Choose one course from both groups.

11 credit hours Area D: Science, Math & Technology

Must complete a science sequence. "L" denotes accompanying lab section. Chem 1211/L is a pre/co-requisite of BIOL 1107/L.

Area E: Social Sciences

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

Freshmen with 15+ hours of AP/Dual Enrollment credit or not enrolled full time are exempt from KSU 1101

CSE 1300 is recommended for all students who have had little to no experience with application programming languages (e.g. Java). Any student interested in any computing major should consider taking this.

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 1112/1113/119 0 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-3 | CSE 2300 Discrete Structures for Computing OR | CSE 1321/L & MATH 1113* | 3 | |
| | MATH 2345 Discrete Mathematics | MATH 1113* | | |
| F-4 | FL 2001 Intermediate Foreign Lang I | FL 1002 | 3 | |
| F-5 | FL 2002 Intermediate Foreign Lang II | FL 2001 | 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 1107

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

Additional Requirements (8 credit hours)

| | Prerequisites | | |
|---|---------------------|---|--|
| STAT 1107 Introduction to Statistics | MATH 1111 or higher | 3 | |
| MATH 2332 Probability and Data Analysis | MATH 1190 | 3 | |
| STAT 3010 Computer Applications of Statistics | STAT 1107 | 3 | |
| | | | |

Students must have a C or better in these courses

Upper Division Major Courses (33 credit hours)

| | Prerequisites | | |
|---|---------------|---|--|
| CS 3410 or CSE 3153 Database Systems | CSE 1322/L | 3 | |
| CSE 3203 Overview of Mobile 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 to Cloud | CSE 1322/L | 3 | |
| ACST 3530 Linux Operating Systems | ACST 3510 | 3 | |
| ACST 3540 Social Media & Global Computing | CSE 1322/L | 3 | |
| ACST 3710 Digital Game Design & Team Project | CSE 1322/L | 3 | |
| ACST 4620 Computing Security | ACST 3530 | 3 | |
| ACST 4850 Interdisciplinary Project & Portfolio | ACST 3340 | 4 | |
| + 2 hours from General Education (MATH 1190 and D-2 Lab credit) | | | |

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 |
|--|
| 0/ 11 / |
| High Performance Computing (HPC) |
| |
| Applied Computing |
| |
| Computing and Information Systems |
| Commuting and the Colon of a |
| 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 | :s | | |
|-----------------------|---------------|---------|----|--|--|
| | | | | | |
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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