2023-2024 Catalog

Computer Science

Bachelor of Science
**Academic Department**
Mathematics
**Total Credits 68**

## Computer Science

| Item # | Course Title | | Credits |
|---|---|---|---|
| ☐ COMSC 1450 | Introduction to Programming and Computer Science | | 4 |
| ☐ COMSC 1451 | Object Oriented Programming | COMSC 1451 Prerequisite: COMSC 1450 | 4 |
| ☐ COMSC 2351 | Data Structures | COMSC 2351 Prerequisite: COMSC 1451 | 3 |
| ☐ COMSC 3365 | Organization of Computer Programming Languages | COMSC 3365 Prerequisites: COMSC 1451 | 3 |
| ☐ COMSC 3375 | Database Systems | COMSC 3375 Prerequisites: COMSC 1451 | 3 |
| ☐ COMSC 3385 | Computer Architecture | COMSC 3385 Prerequisites: COMSC 1451 | 3 |
| ☐ COMSC 4101 | Computer Science Seminar | | 1 |
| ☐ COMSC 4320 | Operating Systems | COMSC 4320 Prerequisites: COMSC 3385 | 3 |
| ☐ COMSC 4340 | Computer Networks | COMSC 4340 Prerequisite: COMSC 1451 | 3 |
| ☐ COMSC 4345 | Foundations of Data Science | COMSC 4345 Prerequisites: COMSC 3375 | 3 |
| ☐ COMSC 4350 | System Development Project | | 3 |

## Computer Science Electives

Complete six hours of the following courses:

| Item # | Course Title | | Credits |
|---|---|---|---|
| ☐ COMSC 3371 | Introduction to Data Analytics | COMSC 3372 Prerequisite MATH 2435, or MATH 3332, or MATH 3450, or PSYC 3433 | 3 |
| ☐ COMSC 3372 | Data Visualization | COMSC 3372 Prerequisite MATH 2435, or MATH 3332, or MATH 3450, or PSYC 3433 | 3 |
| ☐ GCSE 4301 | Governing the Digital Ecosystem – Technology and Geopolitics | GCSE 4301 Prerequisites: GCSE 3301/3101, 3302/3102 | 3 |
| ☐ GCSE 4379 | Cyber Warfare | | 3 |

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|---|---|---|---|
| ☐ COMSC 4393 | Special Projects with Department Chair Approval | | 3 |

## Mathematics

| Item # | Course Title | | Credits |
|---|---|---|---|
| ☐ MATH 1431 | Calculus I | MATH 1431 Prerequisite: MATH 1430 or department consent. | 4 |
| ☐ MATH 1432 | Calculus II | MATH 1432 Prerequisite: Grade of 'C' or Better in MATH 1431 | 4 |
| ☐ MATH 2431 | Calculus III | MATH 2431 Prerequisite: MATH 1432 with a grade of "C" or better | 4 |
| ☐ MATH 3334 | Linear Algebra I | MATH 3334 Prerequisite: MATH 1432 | 3 |
| ☐ MATH 3335 | A First Course in Probability | MATH 3335 Prerequisite: MATH 1432 | 3 |
| ☐ MATH 3360 | Discrete Mathematics | MATH 3360 Prerequisite: MATH 1431 | 3 |
| ☐ MATH 3450 | Biostatistics I | | 4 |

## Lab Science Course Requirement

Complete at least one lecture/lab in an approved science area (BIOL, CHEM, PHYS).