Bachelor of Arts in Computer Science (effective Spring 2022)

**Choose ONE course**

- **CGS 1920** Intro to Computing (1 credit)
- **OR**
  - **CIS 1000** Intro to Programming
- **OR**
  - **IDC1000** Compt Science for Everyone

All courses are 3 credits, except as noted.

**CS Electives (6 courses):** Must take at least one course from each elective group (most electives are 3 credits). Remaining three elective courses must be taken from these elective groups.

**Foundations**
- COP 4534 - Algorithm Techniques (Prereq: COP3530)
- COP 4555 - Programming Languages (Prereq: COP3530)
- COT 3510 - Applied Linear Structures (Prereq: see syllabus; Coreq: COT3100 or MAD2104)
- COT 3541 - Logic for CS (Prereq: COP3337 & COT3100)
- COT 4521 - Intro to Computational Geometry (Prereq: COP3530)
- COT 4601 - Fundamentals of Quantum Computing (Prereq: COP3337 or COP3804 and COT3100)
- MAD 3301 - Graph Theory (Prereq: COP2210 & COT3100 or MAD2104)
- MAD 3512 - Theory of Algorithms (Prereq: COP3530)
- MWF 4302 - Math Logic (Prereq: MAD3512)

**Systems**
- CEN 4010 - Cloud Computing (Prereq: CNT4713 and (CDA3102 or CDA4101))
- CIS 4203 - Digital Forensics (Prereq: COP2210/COP2250/EEL2880)
- CIS 4731 - Fund Blockchain Technologies (Prereq: COP3530)
- CNT 4713 - Net Centric Computing (Prereq: COP4338)
- COP 4520 - Intro to Parallel Computing (Prereq: COP3530 and (CDA3102 or CDA4101 or EEL4709))
- COP 4604 - Advanced UNIX Programming (Coreq: COP4610)
- COP 4710 - Database Management (Prereq: COP3337; Coreq: COP3530)
- COP 4751 - Advanced Database Management (Prereq: COP4710)
- COP 4431 - Applied Parallel Computing (Prereq: COP3530 and (CDA3102 or CDA4101 or EEL4709))
- CTS 4406 - Database Administration (Prereq: COP4710)

**Applications**
- CAP 4052 - Game Design & Dev (Prereq: STA2023 or STA3013 and COP3000 and CAP4104)
- CAP 4104 - Human Comp Interaction (Prereq: COP3337)
- CAP 4630 - Artificial Intelligence (Prereq: COP3530)
- CAP 4641 - Net Language Processing (Prereq: COP3530)
- CAP 4770 - Intro to Data Mining (Prereq: COP3530, Coreq: COP4710)
- CAP 4830 - Modeling & Simulations (Prereq: STA2023 or STA3013 and COP3000)
- CEN 4021 - Software Engineering I (Prereq: CEN4010)
- CEN 4072 - Software Testing (Prereq: COP3530)
- COP 4226 - Adv Windows Program (Prereq: COP3530)
- COP 4655 - Mobile App Dev (Prereq: CAP4104 and CEN4010)

* Prerequisites:
  - COP2210: MAC1140 or higher level math course
  - COT3100: Prereq: MAC XXXX and COP XXXX (any MAC course and any COP course)
  - Coreq: (COP2210 or COP 2250 or EEL2280)
  - ENC3249/ENC3213: UCC English requirements
  - MAD2104: MAC1105 or MGF1106

A line indicates a prerequisite. The course above must be completed before the course below can be taken.

A diamond indicates a co-requisite. The course closer to the diamond may be taken at the same time as the co-requisite. The co-requisite is a prerequisite for any course that requires the course closer to the diamond.