Bachelor of Arts in Computer Science (effective Spring 2022)

Choose ONE course

<table>
<thead>
<tr>
<th>Course</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>CGS 1920 Intro to Computing (1 credit)</td>
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<tr>
<td>COP 1000 Intro to Programming</td>
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<tr>
<td>IDC1000 Compt Science for Everyone</td>
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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.

Choose ONE course from each group:

**Foundations**
- COP 4554 - 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 COT 3100)
- MAD 3301 - Graph Theory (Prereq: COP2210 & (COT3100 or MAD2104))
- MAD 3512 - Theory of Algorithms (Prereq: COP3530)
- MIF 4302 - Math Logic (Prereq: MAD3512)

**Systems**
- CEN 4083 - Cloud Computing (Prereq: CNT4713 and (CDA3102 or CDA4101))
- CIS 4203 - Digital Forensics (Prereq: COP2110/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 4409 - Database Administration (Prereq: COP4710)

**Applications**
- CAP 4052 - Game Design & Dev (Prereq: STA2023 or STA3033 and COP3530 and CAP4104)
- CAP 4104 - Human Comp Interaction (Prereq: COP3530)
- CAP 4630 - Artificial Intelligence (Prereq: COP3530)
- CAP 4641 - Nat Lang Processing (Prereq: COP3530)
- CAP 4770 - Intro to Data Mining (Prereq: STA-2023 or 2122/3033/4322 and COP-3530/3465)
- CAP 4630 - Modeling & Simulations (Prereq: STA2023 or STA3033 and COP3530)
- CEN 4021 - Software Engineering II (Prereq: CEN4010)
- CEN 4072 - Software Testing (Prereq: COP3530)
- COP 4226 - Adv Windows Program (Prereq: COP3530)
- COP 4655 - Mobile App Dev (Prereq: COP4104 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.

Nine additional credits must be taken from one cognitive area outside SCIS. For example, 9 credits within a minor or certificate meets this requirement. Find minors and certificates in the FIU Undergraduate Catalog @ https://catalog.fiu.edu/ Pending advisor approval.