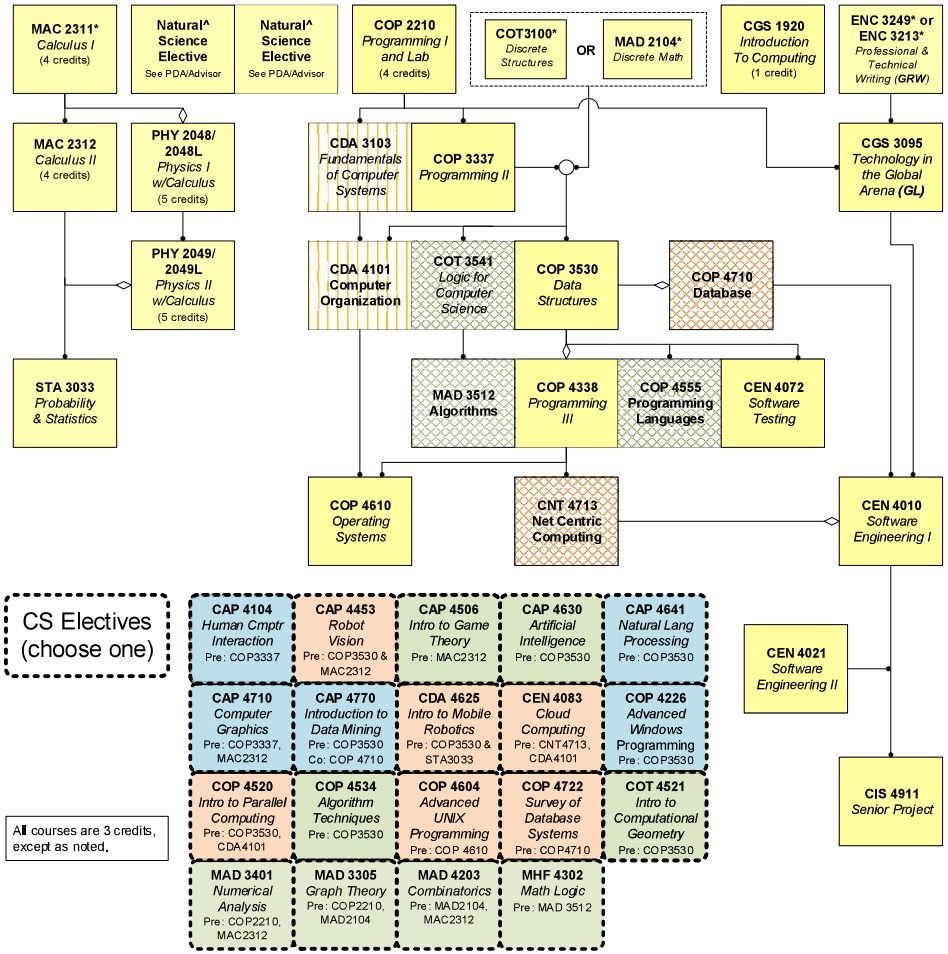
FIU Computing & Information Sciences

Bachelor of Science in Computer Science

Software Design & Development Track (effective 8/2012)



CS Electives (choose one)

CAP 4104 *Human Cmptr Interaction* Pre: COP3337	**CAP 4453** *Robot Vision* Pre: COP3530 & MAC2312	**CAP 4506** *Intro to Game Theory* Pre: MAC2312	**CAP 4630** *Artificial Intelligence* Pre: COP3530	**CAP 4641** *Natural Lang Processing* Pre: COP3530
CAP 4710 *Computer Graphics* Pre: COP3337, MAC2312	**CAP 4770** *Introduction to Data Mining* Pre: COP3530 Co: COP 4710	**CDA 4625** *Intro to Mobile Robotics* Pre: COP3530 & STA3033	**CEN 4083** *Cloud Computing* Pre: CNT4713, CDA4101	**COP 4226** *Advanced Windows* Programming Pre: COP3530
COP 4520 *Intro to Parallel Computing* Pre: COP3530, CDA4101	**COP 4534** *Algorithm Techniques* Pre: COP3530	**COP 4604** *Advanced UNIX Programming* Pre: COP 4610	**COP 4722** *Survey of Database Systems* Pre: COP4710	**COT 4521** *Intro to Computational Geometry* Pre: COP3530
MAD 3401 *Numerical Analysis* Pre: COP2210, MAC2312	**MAD 3305** *Graph Theory* Pre: COP2210, MAD2104	**MAD 4203** *Combinatorics* Pre: MAD2104, MAC2312	**MHF 4302** *Math Logic* Pre: MAD 3512	

All courses are 3 credits, except as noted.

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.

A junction is where multiple prerequisites are joined.

* Prerequisites:
- ENC3249/ENC3213: UCC English requirements
- MAC2311: MAC1147
- COT3100 & MAD2104: MAC1105
- COP2210: MAC1140 or higher level math course

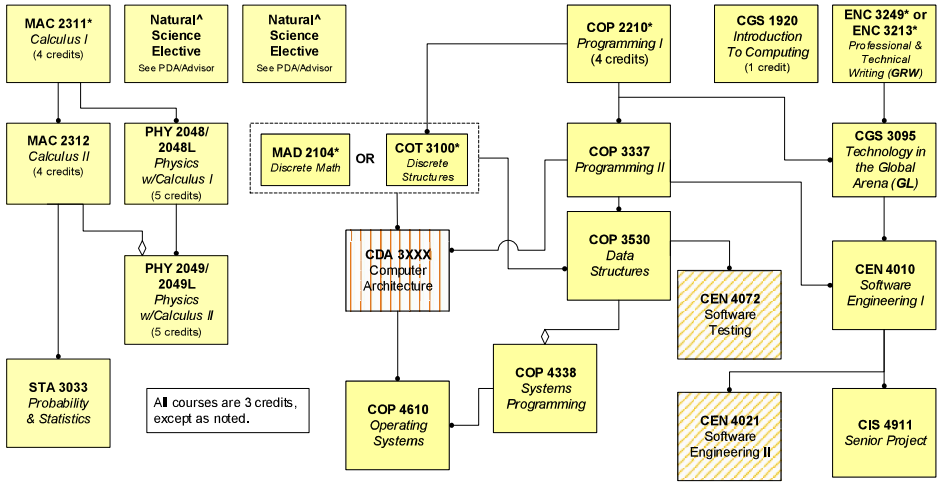
^ Natural Science electives: lab not needed unless required by offering dept.

Rev 1/2019

FIU Computing & Information Sciences

Bachelor of Science in Computer Science

Software Design & Development Track (effective 01/2020)



CS Electives (7 courses): **Must take at least one course from Foundations group and one course from Systems group. Remaining five elective courses must be taken from these elective groups (most electives are 3 credits).**

Foundations

- ☐ CAP 4506-*Intro to Game Theory* (Prereq: MAC2312)
- ☐ COP 4534-Algorithm Techniques (Prereq: COP3530)
- ☐ COP 4555-*Programming Languages* (Prereq: COP3530)
- ☐ COT 3541-*Logic for CS* (Prereq: COP3337 & COT3100)
- ☐ COT 4521-*Intro to Computational Geometry* (Prereq: COP3530)
- ☐ MAD 3305-*Graph Theory* (Prereq: COP2210, MAD2104)
- ☐ MAD 3401-*Numerical Analysis* (Prereq: COP2210, MAC2312)
- ☐ MAD 3512-*Theory of Algorithms* (Prereq: COP3530)
- ☐ MAD 4203-Combinatorics (Prereq: MAD2104, MAC2312)
- ☐ MHF 4302-*Math Logic* (Prereq: MAD3512)

Systems

- ☐ CAP 4453-*Robot Vision* (Prereq: COP3530, MAC23123)
- ☐ CDA 4625-*Intro to Mobile Robotics* (Prereq: COP3530, STA3033)
- ☐ CEN 4083-*Cloud Computing* (Prereq: CNT4713, XXXX)
- ☐ CNT 4713-*Net Centric Computing* (Prereq: COP4338)
- ☐ COP 4520-*Intro to Parallel Computing* (Prereq: COP4338, XXXX)
- ☐ COP 4604-Advanced UNIX Programming (Prereq: COP4610)
- ☐ COP 4710-*Intro to Database Systems* (Prereq: COP3530)
- ☐ COP 4722-Survey of *Database Systems* (Prereq: COP4710)

Applications

- ☐ CAP 4104-*Human Comp Interaction* (Prereq: COP3337)
- ☐ CAP 4630-*Artificial Intelligence* (Prereq: COP3530)
- ☐ CAP 4641-*Nat Lang Processing* (Prereq: COP3530)
- ☐ CAP 4710-*Computer Graphics* (Prereq: COP3337, MAC2312)
- ☐ CAP 4770-*Intro to Data Mining* (Prereq: COP3337, Co-req: COP4710)
- ☐ COP 4226-*Adv Windows Program* (Prereq: COP3530)

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.

A junction is where multiple prerequisites are joined.

* Prerequisites:
- ENC3249/ENC3213: UCC English requirements
- MAC2311: MAC1147
- COT3100 & MAD2104: MAC1105
- COP2210: MAC1140 or higher level math course

^ Natural Science electives: lab not needed unless required by offering dept.

3/2019