Computer and Technology Majors at FSU

COMPUTER ENGINEERING*

What is it?
- The study of digital systems and how they interface with the world; including hardware, software, and algorithm design.

What will I study?
- How to design and interface embedded computer systems; how to design and implement digital hardware; software and algorithm development; digital systems theory

What courses will I need before I start?
- Calculus I
- Calculus II
- Calculus III
- Differential Equations
- Linear Algebra
- General Chemistry I w/ Lab
- General Physics A w/ Lab
- General Physics B w/ Lab

Who can I contact for information?
- Hillary Campbell, Mapping Coord. hdcampbell@fsu.edu

COMPUTATIONAL SCIENCE
(Scientific Computing)

What is it?
- The integration of mathematics and computation to solve problems in science and engineering.

What will I study?
- Mathematical and computational algorithms for science applications; how to translate these algorithms into one of several computer languages, including Python and C++; how to conduct scientific research using algorithms and computation

What courses will I need before I start?
- Calculus I
- Calculus II
- Introduction to Scientific Computing or Introductory Programming
- Science course w/ Lab for science major

Who can I contact for information?
- Karey Fowler, Academic Advisor advising@sc.fsu.edu

INFORMATION TECHNOLOGY

What is it?
- Designing, creating, and managing information systems to meet the needs of an organization.

What will I study?
- Technical communication, research and data analysis, information science, information systems and services

What courses will I need before I start?
- Precalculus
- 2000-level Statistics
- Any Database course
- Any Programming course
- Any Object-Oriented Programming
- Principles of Macroeconomics
- Any general Psychology course
- Any general Ethics course

Who can I contact for information?
- CCI Advising Center advising@cci.fsu.edu

COMPUTER SCIENCE*†

What is it?
- The study of software development and engineering.

What will I study?
- Data & instruction processing; mobile app development; programming languages including C++ and Python

What courses will I need before I start?
BA degree option:
- Calculus I

BS degree option:
- Calculus I & II
- Introductory Programming
- 2 Natural Science courses

COMPUTER PROGRAMMING AND APPLICATIONS

What is it?
- The introductory study of programming with a large amount of flexibility.

What will I study?
- Introductory programming language courses in C++, Java, and Python

What courses will I need before I start?
- Calculus I

Who can I contact for information?
- Kimberly Pack, Academic Advisor advisor@cs.fsu.edu

Other majors you may want to consider: Studio Art; Information, Communication & Technology

Program information subject to change.
* denotes majors that are also available at the Panama City Campus. † denotes majors that are also available as Distance Learning.
Please refer to the FSU Academic Program Guide (academic-guide.fsu.edu) and Match Major Sheets (career.fsu.edu/resources) for specific course numbers & more information.
Effective Summer 2017

Computer and Technology Majors at FSU

COMPUTATIONAL BIOLOGY
(Biology)

What is it?
- An interdisciplinary major intended to train students to develop computational models and algorithms to solve biological problems.

What will I study?
- Biology; genetics; scientific computing; algorithms for scientific applications

What courses will I need before I start?
- Calculus I
- C++ or Java programming course
- General Biology I w/ Lab
- General Biology II w/ Lab
- General Chemistry I
- General Chemistry II

Who can I contact for information?
- Bonnie Garcia-Gloeckner, Advisor
  bgarcia@bio.fsu.edu

COMPUTATIONAL BIOLOGY
(Computer Science)

What is it?
- An interdisciplinary major intended to develop an understanding of software development and the fundamentals of biology.

What will I study?
- Biology and computer science electives; genetics; programming languages

What courses will I need before I start?
- Calculus I
- General Biology I
- General Biology II
- General Chemistry I w/ Lab
- General Chemistry II w/ Lab

Who can I contact for information?
- Kimberly Pack, Academic Advisor
  advisor@cs.fsu.edu

COMPUTER CRIMINOLOGY

What is it?
- The study of how crimes are facilitated and committed through the use of computers.

What will I study?
- Trends in criminal activity and behavior; object-oriented programming; how to detect and combat cybercrime

What courses will I need before I start?
Computer Science degree option:
- College Algebra
- Precalculus
- Computer Programming

Criminology degree option:
- College Algebra
- Precalculus
- Computer Programming

Who can I contact for information?
- Computer Science: Kimberly Pack
  advisor@cs.fsu.edu
- Criminology Advisor: Rahila Arshad
  rarshad@fsu.edu

MANAGEMENT INFORMATION SYSTEMS

What is it?
- This major provides students with both business and technical knowledge allowing them to manage the design and development of systems related solutions for companies.

What will I study?
- Design and analysis of information systems, databases and programming language

What courses will I need before I start?
- Calculus for Business
- Business Statistics
- Introduction to Financial Accounting
- Introduction to Managerial Accounting
- Principles of Macroeconomics
- Principles of Microeconomics
- Microcomputer Applications for Business

Who can I contact for information?
- College of Business Advising
  ugprog@business.fsu.edu

Other majors you may want to consider: Studio Art; Information, Communication & Technology

Program information subject to change.
* denotes majors that are also available at the Panama City Campus. † denotes majors that are also available as Distance Learning.
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Effective Summer 2017   **Please flip over for additional majors →**