

The Associate in Science (A.S.) Degree in Computer Information Technology prepares students to enter or advance in the field of information technology.

The curriculum integrates technical skills and general education to train students for a career as a developer, software engineer, programmer-analyst, customer support specialist, database developer, or web developer.

<input checked="" type="checkbox"/> Task
<input type="checkbox"/> Explore career resources at <a href="https://fscj.edu/student-services/career-development">fscj.edu/student-services/career-development</a> .
<input type="checkbox"/> Meet with your advisor each term.
<input type="checkbox"/> Fulfill the Civic Literacy requirement.
<input type="checkbox"/> Satisfy the associate in science degree graduation requirements.

### Career Options

This degree prepares students for a career as a developer, software engineer, programmer-analyst, customer support specialist, database developer, or web developer.

### Advising

(904) 598-5676 or net@fscj.edu.

### Sample Roadmap

This roadmap provides general guidance about required courses. For specific guidance about your individual academic degree plan, please see an advisor. Also refer to the College Catalog and class schedule for additional information. **Full-time students will refer to the term-by-term recommendations, and part-time students will take courses in the order listed.**

A minimum grade of C or higher must be achieved in all professional courses, as well as courses used to satisfy the general education and civic literacy requirements. A list of Professional Elective Coursework options is available on page 3.

#### Term 1

<input checked="" type="checkbox"/>	Course: Course Title	Credit Hours	Terms Offered
<input type="checkbox"/>	ENC 1101: English Composition I or ENC 1101C: English Composition I Enhanced or ENC 1102: Writing About Texts	3-4	Varies
<input type="checkbox"/>	CTS 1133C: Software Configuration	3	All
<input type="checkbox"/>	CTS 1131C: Hardware Configuration	3	All
<input type="checkbox"/>	CGS 1100C: Microcomputer Applications for Business and Economics	3	All

#### Term 2

**Note:** Students who wish to take COP 2073C to fulfill the professional elective coursework requirement are strongly recommended to take STA 2023 prior to enrollment into the course.

<input checked="" type="checkbox"/>	Course: Course Title	Credit Hours	Terms Offered
<input type="checkbox"/>	BSC 1005: Life in Its Biological Environment or BSC 2010C: Principles of Biology I or BSC 2085C: Human Anatomy and Physiology I or AST 1002: Introduction to Astronomy or CHM 1020: Chemistry for Liberal Arts or CHM 2045C: General Chemistry and Qualitative Analysis I or ESC 1000: Earth and Space Science or EVR 1001: Introduction to Environmental Science or PHY 1020C: Physics for Liberal Arts with Laboratory or PHY 2048C: Physics I With Calculus or PHY 2053C: General Physics I	3-4	Varies
<input type="checkbox"/>	COP 1000C: Introduction to Computer Programming	3	All
<input type="checkbox"/>	CNT 2001C: Computer Networks and Telecommunications or CET 2600C: Network Fundamentals (Cisco 1)	3	Varies
<input type="checkbox"/>	MAC 1105: College Algebra or higher-level MAC prefix course or MAP 2302: Differential Equations or MGF 1106: Topics in College Mathematics or MGF 1107: Explorations in Mathematics or STA 2023: Elementary Statistics	3-5	Varies

#### Term 3

<input checked="" type="checkbox"/>	Course: Course Title	Credit Hours	Terms Offered
<input type="checkbox"/>	ARH 2000: Art in the Humanities or PHI 2010: Philosophy in the Humanities or MUL 2010: Music in the Humanities or LIT 2000: Literature in the Humanities or HUM 2020: Topics in the Humanities or THE 2000: Theatre in the Humanities	3	Varies
<input type="checkbox"/>	CTS 1154: Technical Support	3	All
<input type="checkbox"/>	CTS 1120C: Fundamentals of Information Security	3	All
<input type="checkbox"/>	Professional Elective	2-4	Varies

## Important for You to Know

This academic roadmap does not include **developmental education courses** in reading, writing, and/or mathematics that you may be required to take. Students who place into developmental education courses are required to complete designated developmental education courses with a grade of C or higher regardless of program of study. In addition, it does not include **MAT 1033: Intermediate Algebra**, which, for many students, is a prerequisite course for MAC 1105.

### Term 3

<input checked="" type="checkbox"/>	Course: Course Title	Credit Hours	Terms Offered
<input type="checkbox"/>	ARH 2000: Art in the Humanities <b>or</b> PHI 2010: Philosophy in the Humanities <b>or</b> MUL 2010: Music in the Humanities <b>or</b> LIT 2000: Literature in the Humanities <b>or</b> HUM 2020: Topics in the Humanities <b>or</b> THE 2000: Theatre in the Humanities	3	Varies
<input type="checkbox"/>	CTS 1154: Technical Support	3	All
<input type="checkbox"/>	CTS 1120C: Fundamentals of Information Security	3	All
<input type="checkbox"/>	Professional Elective	2-4	Varies

### Term 4

<input checked="" type="checkbox"/>	Course: Course Title	Credit Hours	Terms Offered
<input type="checkbox"/>	AMH 2020: United States History From 1877 to the Present <b>or</b> POS 2041: American Federal Government	3	Varies
<input type="checkbox"/>	CTS 2437C: SQL Server I - Fundamentals <b>or</b> CTS 2440: Oracle SQL and PL/SQL	3 or 4	All
<input type="checkbox"/>	COP 2822C: Web Technologies	4	All
<input type="checkbox"/>	Professional Elective	2-4	Varies

### Term 4

<input checked="" type="checkbox"/>	Course: Course Title	Credit Hours	Terms Offered
<input type="checkbox"/>	Professional Elective	2-4	Varies
<input type="checkbox"/>	MAN 2582: Introduction to Project Management	3	All
<input type="checkbox"/>	CIS 2321: Information Systems	3	All
<input type="checkbox"/>	CIS 1942: Internship	2	All

## Total Program Credit Hours

The **Computer Information Technology** A.S. degree program requires a **minimum of 60 credit hours**. Total program hours may vary based on the student's individual degree plan. Please see an advisor for individual guidance. This program **is eligible** for financial aid.

## Related Roadmaps

### Embedded Technical Certificate(s)

Technical certificates are available within this degree program. Contact an advisor to determine the career education path that is best for you. Embedded technical certificates include:

- Web Development Specialist
- Database Development Specialist
- Computer Programming Specialist
- Information Technology Support Specialist
- Information Technology Analysis

## Program Learning Outcomes

- Students will exhibit effective written and verbal communication skills appropriate to the I.T. environment
- Students will apply technical knowledge when designing an IT solution
- Students will apply critical thinking skills when designing and optimizing database queries

## Professional Elective Coursework Options

### Required Credit Hours: 9

Students may choose, via elective courses, to focus on one of three tracks: Software Development, Web, or Database. **Notes:** Students who wish to take CIS 2349C must first complete CNT 1015; students who wish to take COP 2073C are strongly recommended to first complete STA 2023.

<input checked="" type="checkbox"/>	Course: Course Title	Credit Hours	Track(s)
<input type="checkbox"/>	CAP 1120C: VR/AR Programming	3	Software Development
<input type="checkbox"/>	CAP 2787C: Data Warehousing	3	Software Development
<input type="checkbox"/>	CEN 2071C: Introduction to Software Testing	3	Software Development
<input type="checkbox"/>	CET 2588: Network+ Certification Review	2	Software Development, Web
<input type="checkbox"/>	CGS 1060C: Introduction to Information Technology	3	Software Development, Web, Database
<input type="checkbox"/>	CIS 2349C: Introduction to Big Data Using Hadoop	3	Software Development
<input type="checkbox"/>	CIS 2930: Special Topics	3	Software Development, Web, Database
<input type="checkbox"/>	CNT 1015: Operating Systems Foundations	3	Software Development
<input type="checkbox"/>	COP 2034C: Programming in Python	3	Software Development
<input type="checkbox"/>	COP 2073C: Introduction to Statistical Programming with R	3	Software Development
<input type="checkbox"/>	COP 2220C: C Programming	3	Software Development
<input type="checkbox"/>	COP 2334C: Object-Oriented Programming with C++	3	Software Development
<input type="checkbox"/>	COP 2360C: Introduction to C#	3	Software Development
<input type="checkbox"/>	COP 2551C: Introduction to Object-Oriented Programming with Java <b>or</b> COP 2800C: Java 1	3	Software Development
<input type="checkbox"/>	COP 2805C: Advanced Java Programming	3	Software Development
<input type="checkbox"/>	COP 2806C: Developing Enterprise Applications Using Java EE	3	Software Development
<input type="checkbox"/>	COP 2823C: ASP.NET Programming	3	Software Development
<input type="checkbox"/>	COP 2837C: Introduction to Programming with Visual Basic.NET	3	Software Development
<input type="checkbox"/>	COP 2842C: Internet Programming	4	Software Development
<input type="checkbox"/>	CTS 1136: A+ Certification Review	2	Software Development, Web, Database
<input type="checkbox"/>	CTS 2149: CAPM (Certified Associate in Project Management) Exam Prep Course	3	Software Development
<input type="checkbox"/>	CTS 2456C: Introduction to SAS Programming	3	Software Development, Database
<input type="checkbox"/>	CGS 2555: Introduction to the Internet	4	Web
<input type="checkbox"/>	CGS 2820: Web Site Design and Development	4	Software Development, Web
<input type="checkbox"/>	CGS 2821: Advanced Web Site Design and Development	4	Software Development, Web
<input type="checkbox"/>	CGS 2542: Database Concepts for Microcomputers	3	Database
<input type="checkbox"/>	CTS 2441: Oracle Database Administration <b>or</b> CTS 2436C: SQL Server III - Administration	4	Database
<input type="checkbox"/>	CTS 2445: Advanced Oracle PL/SQL Programming <b>or</b> CTS 2438C: SQL Server II - Programming	3	Database