

About the Program

The Associate in Science (A.S.) Degree in Computer Information Technology prepares students to enter the field of AI and Information Technology by combining traditional college education with hands-on training in a variety of areas including the design and development of actual AI algorithmic components, database establishment, manipulation, and/or corruption repair.

The program curriculum includes but is not limited to comprehensive technical knowledge of artificial intelligence (AI) tools and their real-world applications, as well as understanding the importance of managing the lifecycle of an AI project. Machine learning fundamentals, data collection, classification, and model deployment for natural language processing, the functions of AI virtual assistants, and techniques used in AI for computer vision as domains to build AI solutions are covered. Additional content includes ethics as relevant to the design and implementation of artificial intelligence.

This program requires a **minimum of 60 credit hours**. Total program hours may vary based on the student's individual academic degree plan. This program **is eligible** for financial aid.

Program Requirements

Students must fulfill all requirements outlined in the college catalog.

Important for You to Know

This academic roadmap does not include developmental education courses in reading, writing, and/or mathematics or other prerequisite courses that you may be required to take. In addition, it does not include program graduation requirements.

Additional Information

- ⇒ **Program Information**, including advisor contact details: <https://www.fscj.edu/academics/associate-in-science/2159>.
- ⇒ **Associate in Science Degree Information**, including graduation requirements: <https://catalog.fscj.edu/academics/degree-certificate-programs/associate-in-science-degrees>.
- ⇒ ***Program Requirements**: <https://catalog.fscj.edu/programs/2159>.
- ⇒ **Math Pathways Information**: <https://catalog.fscj.edu/academics/math-pathways>.

Sample Roadmap

This sample roadmap shows one possible pathway to program completion and may not be appropriate for all students. Roadmap sequence may vary based on the student's selected track.

Prior to enrolling in classes, please **meet with an advisor** for specific guidance about your individual academic degree plan. Some courses are offered only once per year; advising is critical for course progression.

See the ***program requirements** for general education course options.

This program includes an **Algebra Through Calculus math pathway**. This pathway is intended for students whose academic program requires a foundation of algebra, followed by a sequence of courses that may lead to calculus.

Term 1

Course	Credits
MAC 1105 - College Algebra or MAC 1105C - College Algebra Enhanced	3-5
AMH 2010 - United States History to 1877 or AMH 2020 - United States History from 1877 to the Present or POS 2041 - American Federal Government	3
CAI 1001 - Introduction to Artificial Intelligence	3
COP 1000C - Introduction to Computer Programming	3
EET 1084C - Survey of Electronics	3

Term 2

Course	Credits
ENC 1101 - English Composition I or ENC 1101C - English Composition I Enhanced	3-4
COP 2034C - Programming in Python	3
CTS 2437C - SQL Server 1 - Fundamentals	3
EGS 1035 - Engineering Ethics and Technology	3
ETS 1603C - Robotics - Mechanics and Controls	3

Term 3

Course	Credits
General Education Humanities Core course	3
General Education Natural Sciences Core course	3-4

Term 4

Course	Credits
AER 1420C - Advanced Driver Assistance Systems (ADAS) and Diagnosis	3
CAI 2100C - Machine Learning Foundations	3
COP 2073C - Statistical Programming with R	3
ETS 1632C - Computer Integrated Manufacturing	3

Term 5

Course	Credits
AER 1425 - The Connected Car: Autonomous Systems and Diagnosis	3
CAI 2300C - Introduction to Natural Language Processing	3
CAI 2840C - Introduction to Computer Vision	3
EET 2271C - AI Industry Applications and Sensor Fusion	3