

CIT, ARTIFICIAL INTELLIGENCE FOUNDATIONS, ADVANCED TECHNICAL CERTIFICATE



Advanced Training for Emerging AI Careers

This certificate provides focused instruction in artificial intelligence concepts and applications, including machine learning and data analysis. Students gain practical experience aligned with current industry practices, preparing them for roles supporting AI technologies across multiple sectors.

Career Opportunities and Income

Visit [sanjac.edu](https://www.sanjac.edu/programs/areas-of-study/stem/ai/) (<https://www.sanjac.edu/programs/areas-of-study/stem/ai/>) for information regarding career opportunities and potential earnings in the Greater Houston region.

Learning & Career Pathway

This is an Advanced Technical Certificate that builds on your prior learning experiences. This award requires having previously earned an Information Technology, Business, or related field Associate of Applied Science degree.

Learning Outcomes and Career Skills

A student completing the last award in the pathway will be able to:

- Analyze foundational concepts of artificial intelligence, including machine learning, neural networks, and data-driven algorithms, to interpret their functions and apply them in industry contexts.
- Analyze historical developments and theoretical frameworks that have shaped the evolution of artificial intelligence.
- Apply AI tools and techniques to real-world scenarios in various industries, such as cybersecurity, finance, and business operations.
- Evaluate ethical, legal, and societal implications of AI technologies, considering issues like privacy, bias, and governance.
- Design effective prompts to interact with AI systems, enhancing the accuracy and relevance of AI-generated outputs.

- Develop AI-driven solutions to address specific challenges within a business or organizational context, demonstrating the ability to operationalize AI concepts.
- Communicate AI concepts and findings effectively to both technical and non-technical audiences, facilitating informed decision-making.

External Learning Experiences

This program includes external learning experiences outside of the classroom, e.g., an internship, externship, clinical, practicum, or cooperative learning experience. Those experiences are typically on-site at a business or organization.

All students participating in external learning experiences are required to comply with the immunization requirements and policies of the external learning sites. Some learning sites outside the college have their own vaccination requirements. These rules come from those facilities and are not mandated by the college. Failure to meet those immunization requirements may limit a student's ability to complete the program and/or may delay the student's graduation date. San Jacinto College does not process exemptions, and students should address potential vaccination exemptions directly with the external learning site.

Locations

- South (<https://www.sanjac.edu/about/locations/south/>)

College Admission

San Jacinto College is an open admission institution. All students are welcome to apply and will be admitted to the College. You may begin the process on the College's "How to Apply (<https://www.sanjac.edu/admissions/how-to-apply/>)" webpage.

Program Admission

The Artificial Intelligence does not have a selective admissions process that require additional application information; however, you must have already earned an Information Technology, Business, or related field Associate of Applied Science degree.

Plan of Study

AIT-AI

First Year

First Term		Credits
ITAI 1370	Foundations of Artificial Intelligence	3
ITAI 1371	Data Governance for Artificial Intelligence	3
Credits		6

Second Term

ITAI 1372	Artificial Intelligence in Cybersecurity	3
ITAI 1373	Artificial Intelligence Policy, Governance, and Compliance	3
ITAI 2370	Operationalizing Artificial Intelligence	3
Credits		9

Second Year

First Term		Credits
ITAI 2371	Artificial Intelligence in Business and Strategy	3

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ITAI 2372 or ITAI 2374	Artificial Intelligence Applications or Practicum - Artificial Intelligence	3
Credits		6
Total Credits		21

Capstone Experience: ITAI 2372 Artificial Intelligence Applications or
Work-based Learning: ITAI 2374 Practicum - Artificial Intelligence