



# ISACA Artificial Intelligence (AI) Fundamentals Exam Prep

**UWF Florida Cybersecurity Training Program**  
**Offered by the University of West Florida Center for Cybersecurity**

## Course Overview

- Course Dates:** December 2-13, 2024
- Duration:** 2 weeks
- Estimated Time Commitment:** 10-15 hours per week
- Instructional Hours:** 15 contact hours
- Delivery Format:** Asynchronous online
- Target Audience:** IT and Cybersecurity managers and practitioners
- Required Prerequisites / Background:** Working knowledge of computers
- CEUs:** 1.5, **CPEs:** 18
- Course Instructor(s):**

Instructor	Email Address
Dr. Guillermo Francia, III	gfranciaiii@uwf.edu

## Course Description

The ISACA AI Fundamentals exam prep course utilizes a hybrid learning approach to help students build an understanding of AI concepts, principles, and uses. Students will learn how to utilize essential software and algorithms to leverage AI’s applications and potential to automate complex tasks and processes. The course also covers Machine Learning, resource requirements for AI adoption, and AI associated risks including its ethical implications.

## NIST NICE Cybersecurity Workforce Framework Mapping

The course addresses cybersecurity competency areas and work roles as identified in NIST’s Special Publication 800- 181 rev 1, National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework available at <https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-181r1.pdf>.





**Cybersecurity Competency Areas:**

- AI Security

**Cybersecurity Work Roles and Categories:**

- Data Analysis (IO-WRL-001)
- Knowledge Management (IO-WRL-003)
- System Security Analysis (IO-WRL-006)

**GRADING**

The course is designed as examination preparation. Students should complete all assignments and take time to review any incorrect answers. Non-credit course students shall receive a grade of either complete or incomplete at the conclusion of the course. Participants must earn a total of 70% or higher on graded assessments to earn a course completion grade.

Students must register to take the certification exam during the first 10 days of the course and report their exam date(s) to their instructor. Students shall take the certification exam(s) within one week of course end date to receive a course completion certificate and digital badge. Each student will receive a voucher to take the exam and students who do not pass on the first attempt will be provided with additional resources and a second voucher.

**Grading Scheme:**

Assignment	Percentage of Grade
<b>Exam Registration</b> <ul style="list-style-type: none"> <li>• Register for the ISACA AI Fundamentals Exam</li> <li>• Submit Exam Date(s) to the instructor</li> <li>• Due no later than the 6<sup>th</sup> business day of the course.</li> </ul>	15%
<b>CompTIA Certification Exam</b> <ul style="list-style-type: none"> <li>• Sit for ISACA Fundamentals of AI Exam</li> <li>• Submit Candidate Score Reports from the exam to the instructor.</li> <li>• Due no later than five business days after the course ends</li> </ul>	10%
<b>Assignment Completion</b> <ul style="list-style-type: none"> <li>• Labs</li> <li>• Quizzes</li> <li>• Practice Questions</li> </ul>	75%
<b>Total</b>	<b>100%</b>



## Course Outline

Modules and Lessons	Assessment
<b>Module 1: Overview and Introduction to AI</b> <ul style="list-style-type: none"><li>○ Introduction and Objectives</li><li>○ Overview</li><li>○ Machine and AI Learning</li><li>○ AI Reasoning, Problem Solving, and Perception</li><li>○ Natural Language Processing</li></ul>	Knowledge Check / Quiz
<b>Module 2: Expert Systems and AI Reasoning</b> <ul style="list-style-type: none"><li>○ Introduction and Objectives</li><li>○ Expert Systems</li><li>○ Types of Reasoning</li><li>○ Robotics Process Automation</li></ul>	Knowledge Check / Quiz Lab
<b>Module 3: Machine Learning</b> <ul style="list-style-type: none"><li>○ Introduction and Objectives</li><li>○ Machine Learning Overview</li><li>○ Statistical Sampling</li><li>○ Statistical Modeling</li><li>○ Classification</li><li>○ Clustering</li><li>○ Learning Methods and Tools</li><li>○ Neural Networks</li></ul>	Knowledge Check / Quiz Lab
<b>Module 4: Resource Requirements for Adopting AI</b> <ul style="list-style-type: none"><li>○ Introduction and Objectives</li><li>○ Adopting AI</li><li>○ Stakeholder Education</li><li>○ Governance and Roles</li></ul>	Knowledge Check / Quiz
<b>Module 5: AI Use, Risks, and Ethics</b> <ul style="list-style-type: none"><li>○ Introduction and Objectives</li><li>○ AI Applications</li><li>○ Consumer Uses of AI</li><li>○ Potential Risks of AI</li><li>○ AI Ethics</li></ul>	Knowledge Check / Quiz