ARTIFICIAL INTELLIGENCE

Purpose:

The Certificate in Artificial Intelligence is an undergraduate program designed to provide students with foundational knowledge of physics-based AI and its applications. This certificate is ideal for those looking to enter the workforce in in-demand professional roles related to artificial intelligence, machine learning, and data analytics. Students who complete this program will gain a solid understanding of essential data analytics techniques and the skill sets necessary to succeed in AI-related employment positions.

Upon completion of this certificate program, students will be able to:

1. Write basic computer programs using a commercial programming language.
2. Possess working knowledge of AI and ML tools and libraries.
3. Apply physics-based artificial intelligence and machine learning principles and techniques in solving Science and Engineering problems.
4. Assume positions in an industry requiring knowledge and skills in these areas.

Criteria for Admission

The certificate is designed to be a standalone credential. The credits earned from this certificate can also be stacked with an undergraduate degree at Texas A&M International University.

Current undergraduate students at Texas A&M International University who wish to apply for the certificate must maintain good academic standing with a cumulative GPA of 2.0 or higher. For applicants who are not current undergraduate students, admission will be considered on a case-by-case basis, depending on an assessment of their ability to successfully complete the certificate program.

Those interested in pursuing the certificate should submit the appropriate form to the School of Engineering as soon as possible but no later than two semesters before completing their degree. The School of Engineering and the Office of the University Registrar will provide documentation certifying the completion of the certificate.

Criteria for Earning the Certificate

Code	Title	Semester Credit Hours
Required Courses		**4**
CSCE 1336	Fundamentals of Programming	
CSCE 1136	Funds of Programming Lab	
Required Courses by Engineering Major		**6**
Computer Engineering		
CSCE 4390	Senior Design II *	
Choose 3 SCH of the following. Topic, research, or study must be AI related		
CSCE 4385	Special Topics in CSCE	
CSCE 4395	Undergraduate Research	
CSCE 4399	Directed Study in CSCE	
Petroleum Engineering		
PETE 4190	Senior Design I *	
PETE 4290	Senior Design II *	
Choose 3 SCH of the following. Topic, research, or study must be AI related		
PETE 4385	Special Topics in PETE	
PETE 4395	Undergraduate Research in PETE	
PETE 4399	Directed Study in PETE	
Systems Engineering		
SENG 4390	Senior Design II *	
Choose 3 SCH of the following. Topic, research, or study must be AI related		
SENG 4385	Special Topics in Systems Engr	
SENG 4395	Undergraduate Research	
SENG 4399	Directed Study in SENG	
Total Semester Credit Hours		**10**

* Senior Capstone project must be AI-based and approved by Director of the AI Center.