

# APPLIED COMPUTING ESSENTIALS, GRADUATE CERTIFICATE

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## Program Description

The graduate certificate in applied computing essentials is a one- year (two-semester), intensive program designed to prepare students from non- computer science backgrounds for success in an MS: Computer Science program. Students in the program will learn from experienced faculty a broad range of applied topics in computer science including foundations of computer science, programming, data structures and algorithms, systems, artificial intelligence, mobile software development.

The goal of the program is to prepare students in both foundational topics and applied skills for career success. Upon successful completion of the program students will be eligible to continue their studies in the university's Master of Science in Computer Science program. Students have an option to complete the program entirely on-campus or online.

## Admission Requirements

Students with a 3-year, or a 4-year bachelor's degree are eligible for admission into the graduate certificate program. Successful applicants will have the equivalent of 2.75 gpa in their undergraduate program or adequate work experience in relevant technology areas. In addition, international students should follow the guidelines provided here. (<https://www.tamucc.edu/admissions/graduate-students/application-process.php>)

## Program Requirements

Admitted students are required to complete the following courses.

Code	Title	Hours
<b>Required Courses</b>		
COSC 5301	Programming I	3
COSC 5302	Foundations of Computer Science	3
COSC 5303	Computer Systems	3
COSC 5314	Programming II	3
COSC 5315	Multi-Platform Software Development	3
COSC 5316	Introduction to Artificial Intelligence	3
<b>Total Hours</b>		<b>18</b>

A GPA average of 3.0 is required for successful completion of the certificate program.

Full-time students will take COSC 5301, COSC 5302, and COSC 5303 in their first semester, and COSC 5314, COSC 5315, and COSC 5316 in their second semester. Part-time students start with COSC 5301 and take other courses as per their advisor's guidance.