Deree

School of Graduate and Professional Education

THE AMERICAN COLLEGE OF GREECE
Pierce
Deree
Alba
1875

# Graduate Certificate in Computer Science

A fast-track option for students wishing to transition into a career in technology and acquire a solid basis in computer science.

If you have little or no background in information technology and computing, the Graduate Certificate in Computer Science carries full academic credit and will help you build fundamental academic and technical competencies in the fields of computer and data science.

NECHE
New England Commission of Higher Education

Deree – The American College of Greece is accredited by the New England Commission of Higher Education.

# Graduate Certificate in Computer Science

## Overview

The **Graduate Certificate in Computer Science** is a post-baccalaureate program of study that serves as a solid basis and a conversion course for people who hold a first degree in a field other than computing and information sciences. It is appropriate for graduates from any discipline who wish to advance or transition into a career in information technology as well as for students who wish to pursue further graduate studies in data science, programming, computing and related IT areas.

The program provides theoretical and practical foundations of computer science so that students can plan, develop, and apply appropriate tools to frame and solve problems across industries. Students will learn how to program, use databases, and perform the basics of data analytics with an industry tool, in order to extract useful information from raw data. Students will also become acquainted with applied mathematical skills in calculus and linear algebra as applicable in data analysis.

## Career Prospects & Placement Opportunities

The Graduate Certificate in Computer Science is ideal for university graduates from any field who wish to transition to a career in information technology and data analytics. It prepares students for further graduate studies in the discipline. Students who complete the program with a grade of B or better are eligible for entry to the MS in Data Science.

Rewarding careers exist in the field of computer science and data analytics. There is an increasing demand for information technology skills worldwide. Graduates of both programs can pursue successful careers in tech companies but also across industries such as banking and finance, insurance, retail trading, manufacturing, start-ups, etc.

## Program Structure and Curriculum

To be awarded a Graduate Certificate in Computer Science, students must successfully complete 4 courses, representing a total of 12 US Credits (or 60 UK credits).

**Required Courses**
Programming Fundamentals (3 credits)
Data Analytics with R (3 credits)
Databases (3 credits)
Applied Mathematics (3 credits)

## Learning Outcomes

The aim of the program is to provide a solid grounding in core topics and techniques of computer science, so participants can confidently transition in more advanced IT topics and tools. At the end of the program students should be able to:

1. Design simple software systems and assess them from a technical perspective.
2. Critically evaluate the techniques for storing and processing data, including business transaction data, and apply the relevant tools.
3. Analyze data for decision-making by applying relevant methods.
4. Formulate ideas and arguments and communicate them effectively, using visualization as well as written and oral formats.

## Admission to Program

Admission to the program requires that students have obtained a bachelor's degree in any discipline from an accredited institution and can demonstrate evidence of English language proficiency. New students are admitted at the start of the Fall, Winter or Spring terms.

## Flexible Study and Course Duration

The program may be completed in one term (full-time), for students starting in Fall, or up to three terms (part-time). Classes run Monday to Thursday. Only for Fall Term 2019 classes will run from 18:00-21:00; from Winter 2020 onwards, classes will run from 18:30-21:30, facilitating working professionals.

## Why pursue a Graduate Certificate in Computer Science

- Explore your potential to transition into the exciting tech world that offers great job prospects.
- Benefit from a flexible program, suitable for working professionals.
- Gain hands-on experience with programming techniques, database systems, and data analytics tools and libraries.
- Be guided by experienced instructors with significant research or industry experience, and supported in developing their own professional and academic interests.

**CONTACT OUR OFFICE OF ADMISSIONS**

For more information on how to apply, fees and our scholarship program
visit our website: www.acg.edu/graduate
or contact the Office of Admissions: +30 210 600 2208 · graduate@acg.edu
Online application: www.acg.edu

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*Deree – The American College of Greece accepts students of any race, color and national or ethnic origin and does not discriminate in its programs*