

## Degree Plan

### Major related courses

GEIT 1411 – Computer Science I  
 GEIT 1412 – Computer Science II  
 GEIT 2421 – Data Structures  
 GEIT 2291 – Professional Ethics  
 GEIT 2331 – Mathematical Reasoning  
 GEIT 3341 – Database I  
 GEIT 3331 – Computer Organization  
 GEIT 3351 – Principles of SW Engineering  
 GEIT 4361 – Internship  
 COSC 2312 – Web Programming  
 COSC 3332 – Discrete Structures and Comb. Analysis  
 COSC 3361 – Computer Networks  
 COSC 3351 – Algorithms  
 COSC 3411 – Systems Programming  
 COSC 4361 – Operating Systems  
 COSC 4461 – Programming Languages  
 COSC 4362 – Artificial Intelligence  
 COSC 4363 – Theory of Computation  
 COSC xxxx – 3 CS Elective courses

### Mathematics related courses

MATH 1422 – Calculus I  
 MATH 1423 – Calculus II  
 MATH 1424 – Calculus III  
 MATH 1313 – Statistical Methods  
 MATH 3433 – Linear Algebra and Diff. Equations  
 PHYS 1421 – Physics for Engineers I  
 PHYS 1422 – Physics for Engineers II

## Program Structure

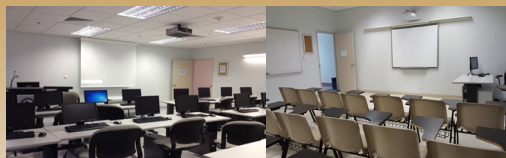
Course	No. of Courses	Credit Hours
Core	26	70
College	9	29
Major	9	29
Elective	3	9

## Commercial Certification

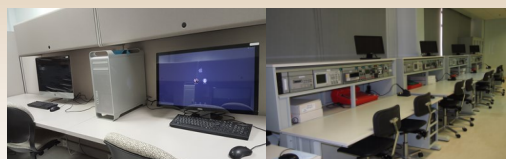


## Facilities

Smart classrooms with Blackboard, Smartboard and Banner.



Labs: Sun, Electronics, Circuits, Robotics, Arduino, Cloud Computing. Android, iOS.



## Admission Requirements

The College of Computer Engineering & Science provides for minimum standards of academic performance from its students. Using a 4.0 scale for course grades, The College of Computer Engineering & Science requires that students maintain minimum grade point averages (GPA) for various categories of courses consisting of:

- 2.0 GPA in courses from the PMU Core Curriculum.
- 2.0 GPA in degree-specific courses (courses from the Core Curriculum that CCES students must complete beyond the minimum requirement).
- 2.25 GPA in courses required by the college (GEIT

## How To Apply

Read Admission Guide here

<https://www.pmu.edu.sa/pdf/viewer?ID=203>

Fill the application form online

[https://www.pmu.edu.sa/admission/apply\\_now\\_ads](https://www.pmu.edu.sa/admission/apply_now_ads)



Prince Mohammad Bin Fahd University

## College of Computer Engineering and Science

## Computer Science



## Want more info?

- [www.pmu.edu.sa](http://www.pmu.edu.sa)  
[cces@pmu.edu.sa](mailto:cces@pmu.edu.sa)
- +966 13 849 8835 / +966 13 849 9711
- @PMU\_CCES

### Address:

College of Computer Engineering and Science  
 P.O.Box 1664 Al-Khobar, 31952  
 Kingdom Saudi Arabia

## Introduction



Computer Science gives a thorough understanding of mathematic, scientific and engineering concept that covers the wide range of computer systems. Students are exposed to course such as data structure, algorithms and operating systems. Other topics also include artificial intelligence, operations research, computer architecture and organization.

## Why Computer Science?

The computer science department in the College of Computer Engineering and Science at PMU provides students the theoretical foundations in the field of computer science and equips them with the practical knowledge needed to succeed in computer industry.

In the world of today, computer science has applications in almost every aspect of life such as medicine, finance, aviation, security, communication, and so on. With such widespread use of computers these days, studying computer science broadens the horizon of our graduates in the job market. We are proud to have faculties from all around the world with expertise in a variety of application areas including Artificial Intelligence, Computer Networks, Databases, Human-Computer Interaction, Operating Systems, Algorithms, Software Engineering, Business Intelligence, Programming Languages, and Computer Organization and Architecture.

## Program Objectives

- Graduates will be able to use their knowledge and development skills to design and implement better solutions for the problems related to computer science.
- Graduates will be able to communicate effectively, work in or lead multi-disciplinary teams.
- Graduates will be encouraged and motivated to pursue higher studies in the area of computer science or related areas

## Program Outcomes

On graduation from the computer science program, the students will have:

- The ability to apply knowledge of computing and mathematics appropriate to the discipline.
- The ability to analyze a problem, identify its solution, and define the appropriate computing requirements.
- The ability to design, implement, and evaluate computer-based systems
- The ability to function on multi-disciplinary teams.
- An understanding of professional and ethical responsibility.
- The ability to communicate effectively.
- An ability to analyze the local and global impact of computing on individuals, organizations, and society
- Recognition of the need for and an ability to engage in continued professional development.
- An ability to use current techniques, skills, and tools necessary for computing practice.
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
- An ability to apply design and development principles in the construction of software systems of varying complexity

## Career Opportunities

Potential careers of the CS Graduate:

- Application Developer/programmer
- Simulation Specialist
- Graphics, AI and Vision Engineer
- Multimedia and Web Design
- Database Developer/Admin
- Systems Analysis
- Software Engineer

## Where some of our graduates are working

Aramco	Halliburton
Sabic	STC
Oracle	Mobily
Samba	Careem
Toshiba	Yokogawa
Rawabi Holdings	GE
Shlumberger	Accenture

