Program Structure

Course	No. of Courses	Credit Hours
Core	26	70
College	9	29
Major	7	24
Elective	4	12

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
COEN 2411 – Circuits I
COEN 3323 – Digital and Logic Design
COEN 3361 – Computer Networks
COEN 3421 – Electronics I
COEN 4361 – Operating Systems
COEN 4413 – Embedded Systems
COEN 4322 – Digital Signal Processing
COEN xxxx – 4 CE 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

Facilities

Smart classrooms with Blackboard, Smartboard and Banner.

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

Admission Requirements

- Completed online application
- Secondary school certificate or equivalent
- General Aptitude Test (Qudrat) or equivalent
- Standard Achievement Admission Test (SAAT – Tahseely) or equivalent (SAT 2)
- PMU English Placement Test or a valid IELTS certificate (Academic version) / TOEFL iBT with acceptable scores

How To Apply

Apply Online ➡ Receive an email

$ Pay the application Fee ➡ Submit Documents

Receive Acceptance ➡ $ Pay the 1st installment

Apply **Pay** **Submit**

Admissions Office:

enrolment@pmu.edu.sa

800 1230 123
+966 13 849 8880

Prince Mohammad Bin Fahd University

College of Computer Engineering and Science

Computer Engineering

Want more info?

www.pmu.edu.sa

cces@pmu.edu.sa

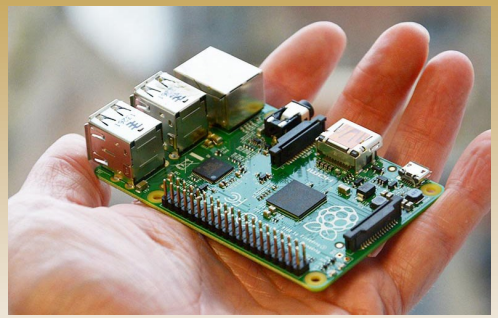
+966 13 849 8835 / +966 13 849 9711

@PMU_CCES

ABET Computing Accreditation Commission

The Computer Engineering program at PMU is accredited since 2017 by The ABET Engineering Accreditation Commission (EAC), USA.

Introduction



Computer Engineering is one of the departments under the College of Computer Engineering and Science at PMU. The Department started the first intake in spring 2006.

Computer Engineers are responsible for developing many of the technological advances that we take for granted. Computer engineers design, develop, and supervise the manufacturing of hardware, software, and networks in computer systems.

Why Computer Engineering?

- The program teaches design concept of computer systems with hands-on experience.
- In addition to hardware design, the program is complemented with software concepts.
- Computer Engineers discipline with its various courses is becoming independent of electrical engineers curriculum as well as computer science curriculum.
- Computer engineering is a blend of electrical engineering and computer science in which students acquire knowledge of digital hardware with the design of software needed to operate the hardware components.
- Computer engineering students can specialize for their master's degree in Communications, Networks, Embedded Systems, Computer Vision, VLSI Design and Signal Processing.
- In terms of career prospects they can opt for both software and hardware jobs, since they possess both these skills.

Program Objectives

The Department of Computer Engineering aims at:

- Graduates will be successful in their work, demonstrate leadership and good communication skills, and function well in teams.
- Graduates will be engaged in self-development and continuous learning in an ever-changing professional environment.
- Graduates will conduct themselves ethically and with integrity, upholding social responsibility, and promoting sustainability
- Graduates will use their computer hardware and software knowledge, and development skills, to analyze requirements, measure and interpret data, explore and evaluate different designs, and innovate robust and effective solutions for problems related to Computer Engineering. [CE]

Student Outcomes

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

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Career Opportunities

Potential careers of the CE Graduate:

- Computer Network Engineer
- Software Design
- Digital Signal and Image Processing
- Integrated Circuit Design
- Internet Applications Development
- Robotics and Automated Manufacturing
- Wireless Communication and Telecommunication Engineer

Where some of our graduates are working

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

Certification Preparation

CISCO

EMC² where information lives