

## الرسالة والأهداف لبرنامج هندسة الإتصالات والحاسبات

### أهداف البرنامج

1. التحلي بنمط قيادي مبني على ممارسة احترافية على الصعيد المحلي والأقليمي في مجال هندسة الاتصالات والحاسبات.
2. تصميم وتشغيل وصيانة أنظمة الاتصالات والترميز وفك الترميز بجميع أنواعها مثل التناظرية والرقمية والمحمولة.
3. استخدام أحدث التقنيات والأدوات والمهارات المعاصرة لهندسة الاتصالات والحاسبات وتوظيفها بالطريقة المثلى لإدارة المشروعات وعمل الممارسات الهندسية المختلفة.
4. التعامل مع الدوائر الإلكترونية بجميع أنواعها ابتداء من المكونات الدقيقة إلى تحليل الدوائر وتصميمها وإيجاد أعطالها.
5. نمذجة وتحليل وتصميم وبناء تصميمات للحاسبات وقواعد البيانات وتأمين الشبكات وأنظمة التخزين السحابية.

### رسالة البرنامج

يلتزم البرنامج بتنمية الجوانب المعرفية والمهارية والسلوكية بما يساهم في إعداد كوادر مؤهلة علميا وعمليا في مجالات هندسة الاتصالات والحاسبات قادرين على المنافسة بجدارة في سوق العمل المحلي والدولي وتبوأ المكانة العلمية لخدمة المجتمع و تنمية البيئة.



## 1. Program Mission

The mission of the communication and computer engineering program is to offer well-rounded future generations of skilled professional communication and computer engineer through an education that is rooted in culture, sustained with theory and progressive with technologically advanced methods. This program is dedicated to sustaining creativity with knowledge and practice. Graduates of the communication and computer engineering program will acquire critical thinking and enhance design creativity to take a leading role in the professional practice. The program is therefore based on the following intentions:

- PM 1. To raise students' understanding of fields other than their own, particularly those associated with the humanities, management, financial and interpersonal skills in order to cooperate with, and ability to lead other interdisciplinary fields.
- PM 2. To provide students with a solid foundation in the fundamental engineering, environmental sciences, which will help them in the communication and computing engineering professions.
- PM 3. To improve students' ability to think critically and creatively to describe and discover the different topics of communication and computer engineering.
- PM 4. To enhance intellectual capability for students to appraise the new trends in communication systems' specialty.
- PM 5. To reframe the students' judgment and articulations about the computer engineering aspects in more detail.

## 2. Program Aims

The main goal of the "Communication and computer engineering program" is to prepare communication and computer engineering who are:

- PA 1. Leading a professional practice on a national and regional scale in Communication and Computer engineering.
- PA 2. Design, operate and maintain digital and analog communication, mobile communication, coding, and decoding systems.
- PA 3. Use contemporary Communication and computer Engineering tools, techniques, and skills for engineering practice and project management.
- PA 4. Manipulate with the electronic circuits, all the way from the discrete components level, circuits' analysis, and design to the troubleshooting.
- PA 5. Model, analyze, design, and build computer, database, Network security and cloud-based architectures.
- PA 6. Use modern topologies of Artificial Intelligence to model, analyze, design, and build computer, database, Network security and cloud-based architectures.