Ministry of Higher Education and Scientific Research Scientific supervision and evaluation Department of Quality Assurance and Academic Accreditation

# Form of academic program description for colleges and institutes

**University: University of Information and Communication Technology** 

**College / Institute: Faculty of Engineering** 

**Department of Communications and Mobile Computing Engineering** 

Date of file filling: / /2018

Signature: Head of Department: Dr. Jafar Date: Signature: Scientific Assistant Name: Date:

Probe file by :

Division of Quality Assurance and University Performance:

Name of the Director of the Division of Quality Assurance and University Performance:

History:

Signature:

### The approval of the Dean

**Description of the academic program** 

The description of this academic program provides a brief summary of the main characteristics of the program and of the expected learning outcomes of the student to demonstrate whether he has made the best use of the opportunities available. It is accompanied by a description of each course within the program

۱. Educational institution	University of Information and Communication Technology
۲. Scientific Section / Center	Communication and Mobile Computing
${}^{r}$ . Name of academic or vocational program	Bachelor of Engineering
٤. Name of final certificate	BS in Communication Engineering and Mobile Computing
°. Study system: Year / Courses / Other	quarterly
٦. Accredited accreditation program	ABET
Other external influences	NOTHING
Date of description setting	

#### **V.** Vision, message, and goals

- The long-term future of digital communications lies in the use of mobile devices, rather than fixed ones. Over the past few years, developers and consumers have seen an increase in mobile communications with a focus on mobile software and devices and, most importantly, quality of service and performance for cost.
- In this engineering section, we look forward to demonstrating the most important developments in the field of mobile communications and computing within a wider context and keeping abreast of the rapid development of the digital communications industry. Through the program, which is prepared according to strict scientific standards, the students will gain the theoretical and practical competence in mobile technology, so that they can design and develop the operational and practical software and the appropriate devices, in addition to acquiring professional skills in the planning of mobile and wireless systems. The high and long-term employment of their specialized expertise is rare.

#### Vision:

Our vision is that the Mobile Communications and Computing Engineering Department will be in the near future of the leading and leading engineering

departments locally, regionally and globally by providing a high quality educational system.

## The message:

The graduation of skilled and innovative engineering cadres required in the labor market have self-motivation and ethical professional values that enable them to research and develop and keep up with the technology of the age in order to serve the community.

## **Objectives:**

The objectives of the department are to focus on three main axes: knowledge, skills and behavior.

1 - Work to have the graduate student skills and knowledge required to design, operate and examine the mobile communication systems and be able to solve emerging problems.

2 - The graduate student is able to adapt to different working environments and dealing with them through communication skills and the ability to work affirmative in multidisciplinary teams or independently during the implementation of complex tasks.

3 - The student should be able to integrate academic knowledge with field practice in order to develop the engineering profession within the field of specialization within the framework of social values and professional ethics.

4 - The student should be able to continue to develop his knowledge and skills for life and take advantage of every new in the field of competence.

## Required program outputs and methods of teaching, learning and evaluation

## (A) Knowledge and understanding

**1.** The ability to apply knowledge in the fields of mathematics and engineering specialized sciences in the field of communication and mobile computing.

2. Ability to solve problems by designing appropriate algorithms.

3. Develop skills and abilities through the proper procedures and contexts.

4. Preparing the student to continue self-learning and the collection of new techniques and skills in engineering fields.

# (B) Special skills

1. Ability to apply appropriate mobile computing knowledge necessary to program outputs and specialization.

2. Ability to analyze problems and identify and define the engineering requirements required for solution.

3. Ability to design, implement and evaluate mobile phone systems and software necessary for implementation.

4. Ability to analyze and influence computing on the performance of individuals, groups, institutions and society in general.

### Teaching and learning methods

- Studying the theoretical and practical academic program for specialized courses.
- The theoretical program is taught using the white data display or the digital display (Data Show) connected to the PC, while discussing the ideas and the scientific vocabulary with the students.
- The practical program of the specialized courses are conducted laboratory or field experiments and the collection of measurements by small groups of students and analysis of measurements and discussion and presentation.

### **Evaluation methods**

- Preparation of classroom and homework assignments.
- Reporting on practical experiences.
- Reporting on small projects and presenting them to students.
- Daily and monthly examinations.
- final exams.

## (C) Thinking skills

**1-** The ability to choose the appropriate methods in analyzing and accomplishing the activities in the field of communications engineering and mobile computing.

2 - Develop good ideas for projects and designs and audit.

3- Ability to give correct and scientific solutions to various problems.

### **Teaching and learning methods**

• Adopting international scientific methods in the preparation of theoretical and scientific curricula.

• Adoption of the diversity of knowledge in the preparation of curriculum vocabulary to include real issues and problems that stimulate students to express their views and solutions proposed and choose the best way to address problems and challenges.

### **Evaluation methods**

• Adopting test questions of a varied nature to include various evaluation issues and finding solutions to the challenges that enable the student to choose the best solution.

Preparation of reports and studies on real problems and how to benefit from
solutions and global experiences.

Organizing visits to various institutions and centers for the purpose of reading and benefiting from the ideas and practical experiences.

(D) General and mobile skills (other skills related to employability and personal development).

1. Ability to work effectively within a team to accomplish a specific task.

2. Understand what is related to the professional specialization of ethics, laws, safety procedures and social belongings.

3. Ability to present, discuss and defend ideas in the correct administrative and scientific manner.

4. Ability to communicate effectively with a group of listeners.

5. Ability to actively participate and plan projects.

6. Ability to master other languages at the level that ensures and achieves the development of work and improve its quality.

### **Teaching and learning methods**

• Participate in the preparatory courses of knowledge about management and how to work in accordance with official contexts.

• Students practice to work through a group of students during the practical program of lessons.

• Encouraging students to participate in seminars and workshops to qualify them to gain the necessary experience to speak and present their ideas to the audience.

### **Evaluation methods**

• The various activities and activities of the students through which the understanding, care and discipline of the students are inferred

• Evaluation through seminars and seminars during which the student is assessed for his moral and scientific responsibility.

• Assessment through the annual project in addition to the summer activities of the specialized courses that contribute to the assessment of the student's performance and intellectual ability in the analysis, analysis and implementation.

