University OF MOSUL

First Cycle – Bachelor's Degree (B.Sc.) – Computer Engineering

بكالوريوس - هندسة الحاسوب

Table of Contents

1. Overview

This catalogue is about the courses (modules) given by the program of Computer Engineering to gain the Bachelor of Science degree. The program delivers (48) Modules ٢٤٠ total ECTS. The module delivery is based on the Bologna Process.

2. Undergraduate Courses 2023-2024

Module 1

Code	Course/Module Title	ECTS	Semester
CE10١	English Language	٢	١
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/sem)**
2	0	33	١٧
Description			
This course develops further knowledge of the grammar and of essential vocabulary in order to lead the students to an advanced level of proficiency. Emphasis is placed on developing listening, speaking, reading and writing skills through an integrated approach. It focuses on grammar and fundamental writing skills. By the end of the course, students are expected to: 1. Understand the main ideas of a variety of written and spoken texts 2. Participate effectively in a short conversation using appropriate language 3. Produce a range of text types in the form of a logical and cohesive paragraph 4. Select appropriate vocabulary to talk about feelings, opinions and experiences. 5. Recognize, understand and use a number of phrasal verbs and collocations. 6. Use effective organizational strategies that include introductions, paragraphs, transitions, and conclusion			

Module 2

Code	Course/Module Title	ECTS	Semester
CE102	Democracy and Human Rights	2	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/sem)**
٢	0	٣٣	١٧
Description			
Among the objectives of the human rights course is to raise awareness of the Iraqi woman (the mother) about her role in the field of exercising her role within her small family, which serves as a micro-community and to exercise her role towards her children by granting them (children's rights), which are included in the framework of (human rights) because the child is the most important pillar and infrastructure In the Iraqi society, which serves as the first nucleus for the establishment of a healthy and healthy society, free from psychological complexes and behavioral disorders, and raising the awareness of the mother about her duties towards her children, not to practice beating and psychological and physical violence, and to treat them in a sound and humane manner, and that the circumstances and daily hard work do not reflect on her behavior towards her children, and this in my opinion is one of the most important goals Which I seek to consolidate when teaching the subject (Human Rights), which considers the rights of the child as one of the most important points and pillars, In addition to directing the father to treat her children with dignity and produce a healthy child mentally, physically and psychologically. Introducing the Iraqi human rights stipulated in the Iraqi constitutions, especially the permanent Iraqi constitution of 2005.			

Module 3

Code	Course/Module Title	ECTS	Semester
CE103	Mathematics 1	7	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/sem)**
4	١	٧٨	٩٧
Description			
To present the fundamental concepts of multivariable Mathematics and to develop student understanding and skills in the topic necessary for its applications to engineering, and science.			

Module 4

Code	Course/Module Title	ECTS	Semester
CE104	Engineering Drawing by Computer	4	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/sem)**
0	3	48	52
Description			
An engineering drawing is a type of technical drawing used to define the requirements for engineering products or components. Typically, the purpose of an engineering drawing is to clearly and accurately capture all geometric features of a product or component so that a manufacturer or engineer can produce the required item. It may also describe the process of making the item, may be used to convey engineering ideas during the design process, or may provide a record of an existing item. Each students the basic commands and tools necessary for professional 2D drawing, design and drafting using AutoCAD.			

Module 5

Code	Course/Module Title	ECTS	Semester
CE105	Electrical Circuits Analysis1	7	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/sem)**
3	٤	١٠٨	٦٧
Description			
The basic objective of this course is to introduce students to the fundamental theory and mathematics for the analysis of Direct Current (DC) and Alternating Current (AC) electrical circuits.			

Module 6

Code	Course/Module Title	ECTS	Semester
CE106	Electronics Physics	5	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/sem)**
3	1	63	62
Description			
Study the basics of manufacturing devices.			

Module 7

Code	Course/Module Title	ECTS	Semester
CE10٧	Computer Principles	٣	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/sem)**
2	١	٤٨	٢٧
Description			
Computing Fundamentals and Office 2013 applications will be covered during this course. Computing Fundamentals focuses on hardware and software and how they work together. The course includes activities and exercises that guide students to explore the Windows operating system, change settings, and customize the desktop. Students also learn how to manage files and folders. On the other hand, the Key Applications focuses on two of the Microsoft Office ٢٠١٣applications: Word and Excel.			

Module 8

Code	Course/Module Title	ECTS	Semester
CE108	Programing using C++ Language	٧	2
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/sem)**
٣	٣	93	٨2
Description			
1. This course introduces students to C++ programming language. 2. Understanding the effort needed to successfully develop engineering-oriented software.			

Module 9

Code	Course/Module Title	ECTS	Semester
CE109	Arabic Language	2	2
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/sem)**
1	0	٣٣	١٧
Description			

Module 10

Code	Course/Module Title	ECTS	Semester
CE110	Mathematics 2	7	2
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/sem)**
4	١	٧٨	٩٧
Description			
This subject provides students with the basic skills of Mathematics, which is the core of many mathematical disciplines such as optimization, financial mathematics, statistics, simulation, etc. This subject introduces students to the fundamental concepts and skills of Mathematics.			

Module 11

Code	Course/Module Title	ECTS	Semester
CE111	Electrical Circuits Analysis 2	7	2
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/sem)**
3	٤	١٠٨	٦٧
Description			
The basic objective of this course is to introduce students to the fundamental theory and mathematics for the analysis of Direct Current (DC) and Alternating Current (AC) electrical circuits.			

Module 12

Code	Course/Module Title	ECTS	Semester
CE112	Digital System Fundamentals	٧	2
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/sem)**
2	4	93	٨٢
Description			
Giving a thorough understanding of the binary system, Boolean algebra, Karnaugh map, Sequential Circuit, and their applications.			

Contact

Ahmed Alkababji | Ph.D. in computer Engineering | Prof.
Email: Ahmedalkababji72@uomosul.edu.iq
Mobile no.:07719744310

Mohammad Tarik | M C S in computer Engineering |Assistant lecturer
Email: Mohammad.t.mohammad@uomosul.edu.iq
Mobile: 07736976916