

| جامعة ديالى<br>مستوى البكالوريوس (الدورة الأولى) - بكالوريوس مع مرتبة الشرف في هندسة الحاسوب<br>أربع سنوات (ثمانية فصول دراسية) - ٢٤٠ وحدة اوروبية - كل وحدة اوروبية = ٢٥ ساعة<br>المنهاج الدراسي للعام ٢٠٢٤ - ٢٠٢٥ |          |          |             |                                       |                                        |                           |             |             |            |           |            |             |             |             |              |              |            |             |                             |                             |               |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|-------------|---------------------------------------|----------------------------------------|---------------------------|-------------|-------------|------------|-----------|------------|-------------|-------------|-------------|--------------|--------------|------------|-------------|-----------------------------|-----------------------------|---------------|---------------|
| University of Diyala<br>Bachelor's level (First cycle) - Honors Bachelor Degree in Computer Engineering<br>Four years (Eight Semesters) - 240 ECTS credits - 1 ECTS = 25hr<br>Program Curriculum (2024 - 2025)      |          |          |             |                                       |                                        |                           |             |             |            |           |            |             |             |             |              |              |            |             |                             |                             |               |               |
| Level                                                                                                                                                                                                               | Semester | No.      | Module Code | Module Name in English                | اسم المادة الدراسية                    | Language                  | SSWL (hr/w) |             |            |           |            |             | Exam hr/sem | SSWL hr/sem | USSWL hr/sem | SWL hr/sem   | ECTS       | Module Type | Prerequisite Module(s) Code | SSWL hr/Week                | USSWL hr/Week |               |
|                                                                                                                                                                                                                     |          |          |             |                                       |                                        |                           | CL (hr/w)   | Lect (hr/w) | Lab (hr/w) | Pr (hr/w) | Tut (hr/w) | Semn (hr/w) |             |             |              |              |            |             |                             |                             |               |               |
| UGI                                                                                                                                                                                                                 | One      | 1        | E 101       | Mathematics I                         | الرياضيات I                            | English                   | 4           |             |            |           | 1          |             | 3           | 78          | 72           | 150          | 6          | B           |                             | 5.2                         | 4.8           |               |
|                                                                                                                                                                                                                     |          | 2        | CPE 101     | Fundamentals of Programming           | اساسيات البرمجة                        | English                   | 2           |             | 3          |           | 1          |             | 3           | 93          | 82           | 175          | 7          | C           |                             | 6.2                         | 5.5           |               |
|                                                                                                                                                                                                                     |          | 3        | CPE 103     | Fundamentals of Electrical Circuits I | اسس الدوائر الكهربائية I               | English                   | 2           |             | 2          |           | 1          |             | 3           | 78          | 72           | 150          | 6          | C           |                             | 5.2                         | 4.8           |               |
|                                                                                                                                                                                                                     |          | 4        | CPE 105     | Principles of Logic Systems           | مبادئ أنظمة المنطق                     | English                   | 3           |             |            |           | 1          |             | 3           | 63          | 87           | 150          | 6          | C           |                             | 4.2                         | 5.8           |               |
|                                                                                                                                                                                                                     |          | 5        | CPE 107     | Engineering Drawing Using Autocad     | الرسم الهندسي باستخدام الأوتوكاد       | English                   |             |             |            | 3         |            |             | 3           | 48          | 27           | 75           | 3          | B           |                             | 3.2                         | 1.8           |               |
|                                                                                                                                                                                                                     |          | 6        | UD11        | English Language I                    | اللغة الانكليزية I                     | English                   | 2           |             |            |           |            |             | 3           | 33          | 17           | 50           | 2          | B           |                             | 2.2                         | 1.1           |               |
|                                                                                                                                                                                                                     |          |          |             |                                       |                                        |                           |             |             |            |           |            |             |             |             |              |              |            |             |                             |                             |               |               |
|                                                                                                                                                                                                                     |          |          |             |                                       |                                        | Total                     | 13          | 0           | 5          | 3         | 4          | 0           | 18          | 393         | 357          | 750          | 30         |             |                             |                             |               |               |
|                                                                                                                                                                                                                     |          | Semester | No.         | Module Code                           | Module Name in English                 | اسم المادة الدراسية       | Language    | SSWL (hr/w) |            |           |            |             |             | Exam hr/sem | SSWL hr/sem  | USSWL hr/sem | SWL hr/sem | ECTS        | Module Type                 | Prerequisite Module(s) Code | SSWL hr/Week  | USSWL hr/Week |
|                                                                                                                                                                                                                     |          | Two      | 1           | E 102                                 | Mathematics II                         | الرياضيات II              | English     | 4           |            |           |            | 1           |             | 3           | 78           | 72           | 150        | 6           | B                           | E 101                       | 5.2           | 4.8           |
|                                                                                                                                                                                                                     |          |          | 2           | CPE 102                               | Computer Programming                   | برمجة الحاسوب             | English     | 2           |            | 3         |            | 1           |             | 3           | 93           | 57           | 150        | 6           | C                           | CPE 101                     | 6.2           | 3.8           |
|                                                                                                                                                                                                                     |          |          | 3           | CPE 104                               | Fundamentals of Electrical Circuits II | اسس الدوائر الكهربائية II | English     | 2           |            | 2         |            | 1           |             | 3           | 78           | 47           | 125        | 5           | C                           | CPE 103                     | 5.2           | 3.1           |
|                                                                                                                                                                                                                     |          |          | 4           | CPE 106                               | Digital Logic Circuits Design          | تصميم دوائر المنطق الرقمي | English     | 2           |            | 2         |            | 1           |             | 3           | 78           | 47           | 125        | 5           | C                           | CPE 105                     | 5.2           | 3.1           |
|                                                                                                                                                                                                                     |          |          | 5           | CPE 108                               | Electronic Physics                     | الفيزياء الالكترونية      | English     | 3           |            |           |            |             |             | 3           | 48           | 52           | 100        | 4           | C                           |                             | 3.2           | 3.5           |
|                                                                                                                                                                                                                     |          |          | 6           | UD14                                  | Human Rights and Democracy             | حقوق الانسان والديمقراطية | Arabic      | 2           |            |           |            |             |             | 3           | 33           | 17           | 50         | 2           | B                           |                             | 2.2           | 1.1           |
|                                                                                                                                                                                                                     |          |          | 7           | UD12                                  | Arabic Language I                      | اللغة العربية I           | Arabic      | 2           |            |           |            |             |             | 3           | 33           | 17           | 50         | 2           | B                           |                             | 2.2           | 1.1           |
|                                                                                                                                                                                                                     |          |          |             |                                       |                                        |                           | Total       | 17          | 0          | 7         | 0          | 4           | 0           | 21          | 441          | 309          | 750        | 30          |                             |                             |               |               |

| Level | Semester | No. | Module Code | Module Name in English             | اسم المادة الدراسية         | Language | SSWL (hr/w) |             |            |           |            |             | Exam hr/sem | SSWL   | USSWL  | SWL    | ECTS | Module Type | Prerequisite Module(s) Code | SSWL    | USSWL   |
|-------|----------|-----|-------------|------------------------------------|-----------------------------|----------|-------------|-------------|------------|-----------|------------|-------------|-------------|--------|--------|--------|------|-------------|-----------------------------|---------|---------|
|       |          |     |             |                                    |                             |          | CL (hr/w)   | Lect (hr/w) | Lab (hr/w) | Pr (hr/w) | Tut (hr/w) | Semn (hr/w) |             | hr/sem | hr/sem | hr/sem |      |             |                             | hr/Week | hr/Week |
| UG2   | Three    | 1   | CPE 201     | Applied Mathematics I              | رياضيات تطبيقية I           | English  | 2           |             |            |           | 1          |             | 3           | 48     | 52     | 100    | 4    | B           | E 102                       | 3.2     | 3.5     |
|       |          | 2   | CPE 203     | Analogue Electronics               | الإلكترونيك التماثلي        | English  | 3           |             |            |           |            |             | 3           | 48     | 102    | 150    | 6    | C           | CPE 108                     | 3.2     | 6.8     |
|       |          | 3   | CPE 204     | Digital Electronics                | الإلكترونيك الرقمي          | English  | 3           |             | 2          |           |            |             | 3           | 78     | 72     | 150    | 6    | C           | CPE 106                     | 5.2     | 4.8     |
|       |          | 4   | CPE 205     | Data Structures and Algorithms     | هياكل البيانات والخوارزميات | English  | 2           |             | 2          |           | 1          |             | 3           | 78     | 72     | 150    | 6    | C           | CPE 102                     | 5.2     | 4.8     |
|       |          | 5   | CPE 206     | Software Engineering               | هندسة البرمجيات             | English  | 2           |             | 2          |           |            |             | 3           | 63     | 87     | 150    | 6    | C           |                             | 4.2     | 5.8     |
|       |          | 6   | UD24        | Crimes of the Baath Regime in Iraq | جرائم نظام البعث في العراق  | Arabic   | 2           |             |            |           |            |             | 3           | 33     | 17     | 50     | 2    | B           |                             | 2.2     | 1.1     |
|       |          |     |             |                                    |                             |          |             |             |            |           |            |             |             |        |        |        |      |             |                             |         |         |
|       |          |     |             |                                    |                             | Total    | 14          | 0           | 6          | 0         | 2          | 0           | 18          | 348    | 402    | 750    | 30   |             |                             |         |         |
|       | Four     | 1   | CPE 202     | Applied Mathematics II             | رياضيات تطبيقية II          | English  | 2           |             |            |           | 1          |             | 3           | 48     | 52     | 100    | 4    | B           | CPE 201                     | 3.2     | 3.5     |
|       |          | 2   | CPE 207     | Computer Architecture              | معمارية الحاسوب             | English  | 3           |             |            |           |            |             | 3           | 48     | 102    | 150    | 6    | C           | CPE 106                     | 3.2     | 6.8     |
|       |          | 3   | CPE 208     | Object Oriented Programming        | البرمجة الشيئية             | English  | 2           |             | 2          |           |            |             | 3           | 63     | 87     | 150    | 6    | C           | CPE 102                     | 4.2     | 5.8     |
|       |          | 4   | CPE 209     | Database Systems                   | أنظمة قواعد البيانات        | English  | 2           |             | 2          |           |            |             | 3           | 63     | 62     | 125    | 5    | C           |                             | 4.2     | 4.1     |
|       |          | 5   | CPE 210     | Microprocessor                     | المعالج الدقيق              | English  | 3           |             | 2          |           |            |             | 3           | 78     | 47     | 125    | 5    | C           |                             | 5.2     | 3.1     |
|       |          | 6   | UD21        | English Language II                | اللغة الإنكليزية 2          | Arabic   | 2           |             |            |           |            |             | 3           | 33     | 17     | 50     | 2    | B           |                             | 2.2     | 1.1     |
|       |          | 7   | UD22        | Arabic Language II                 | اللغة العربية 2             | English  | 2           |             |            |           |            |             | 3           | 33     | 17     | 50     | 2    | B           |                             | 2.2     | 1.1     |
|       |          |     |             |                                    |                             | Total    | 16          | 0           | 6          | 0         | 1          | 0           | 21          | 366    | 384    | 750    | 30   |             |                             |         |         |

| Level | Semester | No.      | Module Code | Module Name in English     | اسم المادة الدراسية                | Language                  | SSWL (hr/w) |             |             |            |            |             | Exam hr/sem | SSWL        | USSWL  | SWL    | ECTS   | Module Type | Prerequisite Module(s) Code | SSWL                        | USSWL   |         |     |
|-------|----------|----------|-------------|----------------------------|------------------------------------|---------------------------|-------------|-------------|-------------|------------|------------|-------------|-------------|-------------|--------|--------|--------|-------------|-----------------------------|-----------------------------|---------|---------|-----|
|       |          |          |             |                            |                                    |                           | CL (hr/w)   | Lect (hr/w) | Lab (hr/w)  | Pr (hr/w)  | Tut (hr/w) | Semn (hr/w) |             | hr/sem      | hr/sem | hr/sem |        |             |                             | hr/Week                     | hr/Week |         |     |
| UGI   | Five     | 1        | CPE 301     | Engineering Analysis       | تحليلات هندسية                     | English                   | 3           |             |             |            |            |             | 3           | 48          | 77     | 125    | 5      | C           | CPE 202                     | 3.2                         | 5.1     |         |     |
|       |          | 2        | CPE 303     | Signals and Systems        | الإشارات والأنظمة                  | English                   | 3           |             |             |            |            |             | 3           | 48          | 77     | 125    | 5      | C           |                             | 3.2                         | 5.1     |         |     |
|       |          | 3        | CPE 305     | Digital System Design      | تصميم نظم رقمية                    | English                   | 3           |             | 2           |            |            |             | 3           | 78          | 47     | 125    | 5      | C           | CPE 204                     | 5.2                         | 3.1     |         |     |
|       |          | 4        | CPE 306     | Control Theory             | نظرية سيطرة                        | English                   | 3           |             | 2           |            |            |             | 3           | 78          | 47     | 125    | 5      | C           | CPE 202                     | 5.2                         | 3.1     |         |     |
|       |          | 4        | CPE 307     | Statistics and Probability | الإحصاء والاحتمالية                | English                   | 2           |             |             |            | 1          |             | 3           | 48          | 77     | 125    | 5      | C           |                             | 3.2                         | 5.1     |         |     |
|       |          | 6        | CPE 308     | Operating Systems          | نظم تشغيل                          | English                   | 3           |             |             |            |            |             | 3           | 48          | 77     | 125    | 5      | C           |                             | 3.2                         | 5.1     |         |     |
|       |          |          |             |                            |                                    | Total                     | 17          | 0           | 4           | 0          | 1          | 0           | 18          | 348         | 402    | 750    | 30     |             |                             |                             |         |         |     |
|       | Six      | Semester | No.         | Module Code                | Module Name in English             | اسم المادة الدراسية       | Language    | SSWL (hr/w) |             |            |            |             |             | Exam hr/sem | SSWL   | USSWL  | SWL    | ECTS        | Module Type                 | Prerequisite Module(s) Code | SSWL    | USSWL   |     |
|       |          |          |             |                            |                                    |                           |             | CL (hr/w)   | Lect (hr/w) | Lab (hr/w) | Pr (hr/w)  | Tut (hr/w)  | Semn (hr/w) |             | hr/sem | hr/sem | hr/sem |             |                             |                             | hr/Week | hr/Week |     |
|       |          |          | 1           | CPE 302                    | Numerical Analysis                 | تحليلات عددية             | English     | 3           |             |            |            |             |             |             | 3      | 48     | 77     | 125         | 5                           | C                           |         | 3.2     | 5.1 |
|       |          |          | 2           | CPE 304                    | Digital Signal Processing          | معالجة إشارة رقمية        | English     | 3           |             |            |            |             |             |             | 3      | 48     | 77     | 125         | 5                           | C                           | CPE 303 | 3.2     | 5.1 |
|       |          |          | 3           | CPE 309                    | Data Communications and Networking | اتصالات البيانات والشبكات | English     | 2           |             |            |            |             | 1           |             | 3      | 78     | 47     | 125         | 5                           | C                           |         | 5.2     | 3.1 |
|       |          |          | 4           | CPE 310                    | Web Design                         | تصميم مواقع               | English     | 2           |             | 2          |            |             |             |             | 3      | 63     | 62     | 125         | 5                           | C                           |         | 4.2     | 4.1 |
|       |          |          | 5           | CPE 311                    | Artificial Intelligence            | ذكاء اصطناعي              | English     | 3           |             |            |            |             |             |             | 3      | 48     | 77     | 125         | 5                           | C                           |         | 3.2     | 5.1 |
|       |          |          | 6           | CPE 312                    | Digital Image Processing           | معالجة صور رقمية          | English     | 3           |             | 2          |            |             |             |             | 3      | 78     | 47     | 125         | 5                           | C                           | CPE 303 | 5.2     | 3.1 |
|       |          |          |             |                            |                                    |                           | Total       | 16          | 0           | 4          | 0          | 1           | 0           | 18          | 363    | 387    | 750    | 30          |                             |                             |         |         |     |