



Republic of Iraq - Ministry of Higher Education and Scientific research  
 Al-Furat Al-Awsat Technical University/ Polytechnic College - Karbala  
 Bachelor's level (First cycle) - Honors Bachelor degree in Building & Construction Eng.Technologies  
 Four years (Eight semesters) - 240 ECTS credits - 1 ECTS = 25hr  
 Program Curriculum (2025 - 2026)

جمهورية العراق - وزارة التعليم العالي والبحث العلمي  
 جامعة الفرات الأوسط التقنية/ كلية البوليتكنك - كربلاء  
 مستوى البكالوريوس (الدورة الأولى) - بكالوريوس مع مرتبة الشرف في هندسة تقنيات البناء والأشغال  
 أربع سنوات (ثمانية فصول دراسية) - 240 وحدة ائتمانية - كل وحدة ائتمانية = 25 ساعة  
 المنهاج الدراسي للعام 2025-2026



| 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 | Structured SWL (h/w) | UnStructured SWL (h/w) | SWL (h/w) |   |
|-------|----------|-----|--------------|---------------------------------------|---------------------------|----------|-------------|-------------|------------|-----------|------------|-------------|-----|-------------|-------------|--------------|------------|------|-------------|-----------------------------|----------------------|------------------------|-----------|---|
|       |          |     |              |                                       |                           |          | CL (hr/w)   | Lect (hr/w) | Lab (hr/w) | Pr (hr/w) | Tut (hr/w) | Semn (hr/w) |     |             |             |              |            |      |             |                             |                      |                        |           |   |
| UGI   | One      | 1   | BCE111-22-PM | Engineering mechanics (1)             | الميكانيك الهندسي (1)     | English  | 4           |             |            |           |            |             | 2   | 3           | 93          | 107          | 200        | 8.00 | C           |                             | 6.2                  | 7.1                    | 13        |   |
|       |          | 2   | BCE112-22-PM | Engineering drawing                   | الرسم الهندسي             | Arabic   | 2           |             | 4          |           |            |             |     | 3           | 93          | 57           | 150        | 6.00 | C           |                             | 6.2                  | 3.8                    | 10        |   |
|       |          | 3   | BCE113-22-PM | Mathematics (1)                       | الرياضيات (1)             | English  | 3           |             |            |           |            | 2           |     | 3           | 78          | 122          | 200        | 8.00 | B           |                             | 5.2                  | 8.1                    | 13        |   |
|       |          | 4   | BCE114-22-PM | Workshop                              | معامل                     | Arabic   |             |             |            |           |            |             |     | 2           | 3           | 33           | 17         | 50   | 2.00        | S                           |                      | 2.2                    | 1.1       | 3 |
|       |          | 5   | ATU10        | English Language (1)                  | اللغة الانكليزية (1)      | English  | 2           |             |            |           |            |             |     | 3           | 33          | 17           | 50         | 2.00 | S           |                             | 2.2                  | 1.1                    | 3         |   |
|       |          | 6   | ATU11        | Arabic Language (1)                   | اللغة العربية (1)         | Arabic   | 2           |             |            |           |            |             |     | 3           | 33          | 17           | 50         | 2.00 | S           |                             | 2.2                  | 1.1                    | 3         |   |
|       |          | 7   | ATU13        | Human rights & democracy              | حقوق الانسان والديمقراطية | Arabic   | 2           |             |            |           |            |             |     | 3           | 33          | 17           | 50         | 2.00 | S           |                             | 2.2                  | 1.1                    | 3         |   |
|       |          |     |              |                                       | Total                     | 15       | 0           | 4           | 2          | 4         | 0          | 21          | 396 | 354         | 750         | 30           |            |      | 26.4        | 23.6                        | 50.0                 |                        |           |   |
|       |          |     |              |                                       | Total hr/w                | 25       |             |             |            |           |            |             |     |             |             |              |            |      |             |                             |                      |                        |           |   |
| UGI   | Two      | 1   | BCE121-22-PM | Engineering mechanics (2)             | الميكانيك الهندسي (2)     | English  | 3           |             |            |           | 2          |             | 3   | 78          | 72          | 150          | 6.00       | C    |             | 5.2                         | 4.8                  | 10                     |           |   |
|       |          | 2   | BCE122-22-PM | Construction materials                | مواد الاشغال              | Arabic   | 2           |             | 2          |           |            |             | 3   | 63          | 87          | 150          | 6.00       | C    |             | 4.2                         | 5.8                  | 10                     |           |   |
|       |          | 3   | BCE123-22-PM | Plane Surveying                       | المساحة المسطوية          | Arabic   | 2           |             | 3          |           |            |             | 3   | 78          | 122         | 200          | 8.00       | C    |             | 5.2                         | 8.1                  | 13                     |           |   |
|       |          | 4   | BCE124-22-PM | Concrete Materials                    | مواد الخرسانة             | Arabic   | 2           |             | 2          |           |            |             | 3   | 63          | 12          | 75           | 3.00       | S    |             | 4.2                         | 0.8                  | 5                      |           |   |
|       |          | 5   | BCE125-22-PM | Engineering Statistics                | الإحصاء الهندسي           | English  | 2           |             |            |           | 1          |             | 3   | 48          | 52          | 100          | 4.00       | B    |             | 3.2                         | 3.5                  | 7                      |           |   |
|       |          | 6   | ATU12        | Computer                              | الحاسوب                   | English  | 2           |             |            |           | 2          |             | 3   | 63          | 12          | 75           | 3.00       | B    |             | 4.2                         | 0.8                  | 5                      |           |   |
|       |          |     |              |                                       |                           |          | Total       | 13          | 0          | 7         | 2          | 3           | 0   | 18          | 393         | 357          | 750        | 30   |             |                             | 26.2                 | 23.8                   | 50.0      |   |
|       |          |     |              |                                       | Total hr/w                | 25       |             |             |            |           |            |             |     |             |             |              |            |      |             |                             |                      |                        |           |   |
| UGII  | Three    | 1   | BCE211-22-PM | Quantity surveying                    | المسح للمقياس             | Arabic   | 2           |             |            |           | 3          |             | 3   | 78          | 72          | 150          | 6.00       | C    |             | 5.2                         | 4.8                  | 10                     |           |   |
|       |          | 2   | BCE212-22-PM | Soil mechanics (1)                    | ميكانيك التربة (1)        | Arabic   | 2           |             | 2          |           |            |             | 3   | 63          | 87          | 150          | 6.00       | C    |             | 4.2                         | 5.8                  | 10                     |           |   |
|       |          | 3   | BCE213-22-PM | Construction drawing                  | الرسم الإنشائي            | English  |             |             | 4          |           |            |             | 3   | 63          | 62          | 125          | 5.00       | S    |             | 4.2                         | 4.1                  | 8                      |           |   |
|       |          | 4   | BCE214-22-PM | Engineering Surveying                 | المساحة الهندسية          | Arabic   | 2           |             | 3          |           |            |             | 3   | 78          | 47          | 125          | 5.00       | C    |             | 5.2                         | 3.1                  | 8                      |           |   |
|       |          | 5   | BCE215-22-PM | Buildings and Industrial Construction | المباني والبناء المصنوع   | Arabic   | 2           |             |            |           | 1          |             | 3   | 48          | 52          | 100          | 4.00       | C    |             | 3.2                         | 3.5                  | 7                      |           |   |
|       |          | 6   | BCE216-22-PM | mathematics (2)                       | الرياضيات (2)             | English  | 2           |             |            |           | 2          |             | 3   | 63          | 37          | 100          | 4.00       | S    |             | 4.2                         | 2.5                  | 7                      |           |   |
|       |          |     |              |                                       |                           |          | Total       | 10          | 0          | 9         | 0          | 6           | 0   | 18          | 393         | 357          | 750        | 30   |             |                             | 26.2                 | 23.8                   | 50.0      |   |
|       |          |     |              |                                       | Total hr/w                | 25       |             |             |            |           |            |             |     |             |             |              |            |      |             |                             |                      |                        |           |   |
| UGII  | Four     | 1   | BCE221-22-PM | Soil mechanics (2)                    | ميكانيك التربة (2)        | Arabic   | 2           |             | 3          |           |            |             | 3   | 78          | 72          | 150          | 6.00       | C    |             | 5.2                         | 4.8                  | 10                     |           |   |
|       |          | 2   | BCE222-22-PM | Buildings Construction                | انشاء المباني             | Arabic   | 2           |             |            |           | 1          |             | 3   | 48          | 77          | 125          | 5.00       | C    |             | 3.2                         | 5.1                  | 8                      |           |   |
|       |          | 3   | BCE223-22-PM | Technical Project                     | المشروع التقني            | Arabic   | 1           |             |            |           | 2          |             | 3   | 48          | 102         | 150          | 6.00       | C    |             | 3.2                         | 6.8                  | 10                     |           |   |
|       |          | 4   | BCE224-22-PM | Concrete Properties                   | خواص الخرسانة             | Arabic   | 2           |             | 2          |           |            |             | 3   | 63          | -13         | 50           | 2.00       | S    |             | 4.2                         | -0.9                 | 3                      |           |   |
|       |          | 5   | ATU20        | English Language (2)                  | لغة الانكليزية (2)        | English  | 2           |             |            |           |            |             | 3   | 33          | 42          | 75           | 3.00       | S    |             | 2.2                         | 2.8                  | 5                      |           |   |
|       |          | 6   | ATU21        | Arabic language (2)                   | لغة عربية (2)             | Arabic   | 2           |             |            |           |            |             | 3   | 33          | 17          | 50           | 2.00       | S    |             | 2.2                         | 1.1                  | 3                      |           |   |
|       |          | 7   | ATU22        | Computers and Artificial Intelligence | الحاسوب والذكاء الصناعي   | Arabic   | 2           |             | 2          |           |            |             | 3   | 63          | -13         | 50           | 2.00       | S    |             | 4.2                         | -0.9                 | 3                      |           |   |
|       |          | 8   | ATU24        | The crimes of the extinct Baath Party | جرائم حزب البعث المهدم    | Arabic   | 2           |             |            |           |            |             | 3   | 33          | 67          | 100          | 4.00       | C    |             | 2.2                         | 4.5                  | 7                      |           |   |
|       |          |     |              |                                       |                           |          | Total       | 15          | 0          | 7         | 3          | 0           | 0   | 24          | 399         | 351          | 750        | 30   |             |                             | 26.6                 | 23.4                   | 50.0      |   |
|       |          |     |              |                                       | Total hr/w                | 25       |             |             |            |           |            |             |     |             |             |              |            |      |             |                             |                      |                        |           |   |
| UGIII | Five     | 1   | BCE311-22-PM | Reinforced Concrete (1)               | الخرسانة المسلحة (1)      | English  | 2           |             |            |           | 2          |             | 3   | 63          | 87          | 150          | 6.00       | C    |             | 4.2                         | 5.8                  | 10                     |           |   |
|       |          | 2   | BCE312-22-PM | Structural analysis theory            | نظرية تحليل الانشاءات     | English  | 2           |             |            |           | 3          |             | 3   | 78          | 72          | 150          | 6.00       | C    |             | 5.2                         | 4.8                  | 10                     |           |   |
|       |          | 3   | BCE313-22-PM | Strength of Materials (1)             | مقاومة المواد (1)         | English  | 2           |             |            |           | 2          |             | 3   | 63          | 62          | 125          | 5.00       | C    |             | 4.2                         | 4.1                  | 8                      |           |   |
|       |          | 4   | BCE314-22-PM | Construction Management               | الادارة الهندسية          | Arabic   | 2           |             |            |           | 1          |             | 3   | 48          | 52          | 100          | 4.00       | S    |             | 3.2                         | 3.5                  | 7                      |           |   |
|       |          | 5   | BCE315-22-PM | Traffic Engineering                   | هندسة المرور              | English  | 2           |             | 2          |           |            |             | 3   | 63          | 37          | 100          | 4.00       | C    |             | 4.2                         | 2.5                  | 7                      |           |   |
|       |          | 6   | BCE316-22-PM | Concrete Technology                   | تكنولوجيا الخرسانة        | Arabic   | 2           |             | 3          |           |            |             | 3   | 78          | 47          | 125          | 5.00       | C    |             | 5.2                         | 3.1                  | 8                      |           |   |
|       |          |     |              |                                       |                           |          | Total       | 12          | 0          | 5         | 0          | 8           | 0   | 18          | 393         | 357          | 750        | 30   |             |                             | 26.2                 | 23.8                   | 50.0      |   |
|       |          |     |              |                                       | Total hr/w                | 25       |             |             |            |           |            |             |     |             |             |              |            |      |             |                             |                      |                        |           |   |
| UGIII | Six      | 1   | BCE321-22-PM | Reinforced Concrete (2)               | الخرسانة المسلحة (2)      | English  | 2           |             |            |           | 2          |             | 3   | 63          | 87          | 150          | 6.00       | C    |             | 4.2                         | 5.8                  | 10                     |           |   |
|       |          | 2   | BCE322-22-PM | Advanced Structural analysis          | التحليل الإنشائي المتقدم  | English  | 2           |             |            |           | 2          |             | 3   | 63          | 87          | 150          | 6.00       | C    |             | 4.2                         | 5.8                  | 10                     |           |   |
|       |          | 3   | BCE323-22-PM | Strength of Materials (2)             | مقاومة المواد (2)         | English  | 2           |             |            |           | 2          |             | 3   | 63          | 37          | 100          | 4.00       | C    |             | 4.2                         | 2.5                  | 7                      |           |   |
|       |          | 4   | BCE324-22-PM | Construction Equipment                | المكينات الإنشائية        | Arabic   | 2           |             |            |           | 2          |             | 3   | 63          | 37          | 100          | 4.00       | B    |             | 4.2                         | 2.5                  | 7                      |           |   |

