

Study Plan of Construction Engineering and Management Program**Second Year/Semester 4****(New)**

| Course code | Course Name | Cr. | The number of hours per week | | | Pre-requisites |
|--------------------|---|----------|------------------------------|----------|----------|----------------|
| | | | Lecture | Tutorial | Lab | |
| EB 204 | Engineering Mathematics (4) | 3 | 2 | 2 | 1 | EB103 |
| ES 105 | Introduction to Construction Engineering. | 3 | 2 | 2 | 0 | None |
| ES 106 | Civil Engineering Drawing | 3 | 2 | 2 | 1 | ES103 |
| ES 107 | Structural Analysis (2) | 3 | 2 | 3 | 0 | ES102 |
| ES 108 | Strength of Materials | 3 | 2 | 3 | 0 | ES102 |
| ES 202!! | Concrete Materials | 3 | 2 | 2 | 1 | ES101!! |
| Total Credit hours | | 18 | | | | |

Construction Engineering & Management- Second Year – Semester 4**(Old)**

| Course code | Course Name | Cr | The number of hours per week | | | Pre-requisites |
|-------------|-----------------------------------|----|------------------------------|----------|-----|----------------|
| | | | Lecture | Tutorial | Lab | |
| BE 204 | Engineering Mathematics (4) | 3 | 3 | 2 | - | BE 103 |
| CM 104 | Civil Engineering Drawing | 3 | 2 | - | 2 | CM 103 |
| CM 105 | Introduction to Construction Eng. | 3 | 2 | 2 | - | - |
| CM 107 | Structural Analysis (2) | 3 | 2 | 2 | - | CM 102 |
| CM 113 | Strength of Materials | 3 | 2 | 2 | - | CM 102 |
| CM 202 | Concrete Materials | 3 | 2 | 2 | 2 | CM 101 |
| HU 151 | Industrial Safety | 2 | 2 | - | - | - |

(New) - Third Year
Third Year – Semester 6

| Course code | Course Name | Cr. | Pre-requisites | The number of hours per week | | |
|--------------------|---|-----------|----------------------------|------------------------------|----------|----------|
| | | | | Lecture | Tutorial | Lab |
| ES 207 | Construction Planning and Scheduling | 3 | ES203 | 2 | 2 | 1 |
| ES 208 | Hydraulics | 3 | EB102 | 2 | 2 | 1 |
| ES 210 | Introduction to Mechanical and Electrical Systems in Construction | 3 | None | 2 | 2 | 0 |
| ES 301!! | Steel Structures Design (1) | 3 | ES102!! & ES108 | 2 | 3 | 0 |
| HU 143!! | Elective- HU Principles of Law | 2 | 2 | - | - | - |
| UGA 03 | Arabic Language Skills | 2 | None | 2 | 0 | 0 |
| UC 01 | Communications Skills | 2 | None | 2 | 0 | 0 |
| Total Credit hours | | 18 | Total Contact Hours | 14 | 9 | 2 |
| | | | | 25 | | |

(Old)

Third Year – Semester 6

| Course code | Course Name | Cr. | The number of hours per week | | | Pre-requisites |
|-------------|---|-----|------------------------------|----------|-----|-----------------|
| | | | Lecture | Tutorial | Lab | |
| CM 205 | Construction planning and scheduling | 3 | 2 | 2 | - | CM 203 |
| CM 301 | Steel Structures Design (1) | 3 | 2 | 2 | - | CM 101 & CM 107 |
| CM 210 | Introduction to Mechanical and Electrical Systems in construction | 3 | 2 | 2 | - | 0 |
| UGA 03 | Arabic language | 2 | 2 | 0 | 0 | 0 |
| UC01 | Communication skills | 2 | 2 | - | - | 0 |

Fourth Year/Semester 8

New

| Course Code | Course Name | Cr. | Pre-requisites | The number of hours per week | | |
|--------------------|--|-----|----------------------------|------------------------------|----------|---|
| | | | | L | T | P |
| ES 305 | Steel Structures Design (2) | 3 | ES 301 | 2 | 3 | 0 |
| ES 307 | Construction Productivity | 3 | ES 303 | 2 | 2 | 0 |
| ES 308 | Computer Aided Design | 3 | ES 206 & ES 301 | 2 | 0 | 3 |
| ES 309 | Foundation Engineering | 3 | ES 204 & ES 206 | 2 | 3 | 0 |
| ES 316 | Elective Course Introduction to advanced BIM (1) | 3 | ES 207 | 2 | 0 | 3 |
| ES 410 | Design of Reinforced Concrete Bridges | 3 | ES 302 | 2 | 2 | 0 |
| ES 409 | Pre-stressed Concrete | 3 | ES 302 | 2 | 2 | 0 |
| Total Credit hours | | 15 | Total Contact Hours | 10 | 10 or 11 | 3 |
| 23 or 24 | | | | | | |

Fourth Year – Semester 8

(Old)

| Course Code | Course Name | Cr. | The number of hours per week | | | Pre-requisites |
|-----------------------------|---|-----|------------------------------|---|---|----------------|
| | | | L | T | P | |
| HU 143 | Principles of Law | 2 | 2 | - | - | - |
| CM 305 | Steel Structures Design (2) | 3 | 2 | 2 | - | CM 301 |
| CM 302 | Reinforced Concrete Design (2) | 3 | 2 | 2 | 0 | CM 206 |
| CM 307 | Construction Productivity | 3 | 2 | 2 | - | CM 205, 303 |
| CM 315 or CM 313 | <u>Elective Course (2)</u> Pre-stressed concrete | 3 | 2 | 2 | 0 | CM 302 |
| | Advanced topic in materials | 3 | 2 | 2 | 1 | CM 202 |
| CM 413 | Soil Mechanics (2) | 3 | 2 | 2 | - | CM 204 |
| HU 151 | Elective -1 | 2 | 2 | - | - | - |
| | Industrial safety | | | | | |
| Total semester credit hours | | | | | | |

Construction Engineering & Management- Fifth Year – Semester 10

| Course Code | Course Name | Cr. | The number of hours per week | | | Pre-requisites |
|-----------------------------|---|----------|------------------------------|----------|----------|----------------|
| | | | L | T | P | |
| CM 404 | Construction methods and equipment | 3 | 2 | 2 | - | CM 205 , 307 |
| CM 405 | Construction Contracting | 3 | 2 | 2 | - | CM 303 |
| CM 410 | Quality control of construction materials | 3 | 2 | 2 | - | CM 202 |
| CM 400-2 | Graduation Project II | 4 | 3 | 0 | 3 | CM 400-1 |
| CM 420 | <u>Elective Course-</u> Independent Study | 3 | 2 | 2 | 0 | |
| CM 406 | Computer Aided Design | 3 | 2 | - | 3 | CM 305 , 302 |
| HU 143 | Elective- HU Principles of Law | 2 | 2 | 1 | 1 | 1 |
| Total semester credit hours | | 18 | | | | |

*مقررات يتم فتحها لدفعة التخرج ربيع 2019 *

| Course code | Course title | Credit hours | L | T | P | Pre-requisites |
|-------------|-----------------------------------|--------------|---|---|---|----------------|
| CM 402 | -Engineering Risk and Uncertainty | 3 | 2 | 2 | | BE208 |
| CM 401 | -Design of Temporary Structures | 3 | 2 | 2 | | CM 302 |

رئيس قسم هندسة وإدارة التشييد

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