Al-Nahrain University College of Engineering Department of Civil Engineering Study Plan for the B.Sc. Degree Course (2024-2025)

First Year

Level One ...

| No. | | SUBJECT | Hr | s Per V | Veek | ECTS |
|-------|----------|---------------------------------------|----|---------|------|------|
| 110. | CODE | SUBJECT | Th | App | Tut | ECIS |
| 1 | UREQ 110 | Workshop | | 3 | | 3.00 |
| 2 | UREQ 111 | Computer Fundamentals and Programming | 2 | 2 | | 3.00 |
| 3 | MATH 110 | Mathematics | 4 | | | 5.00 |
| 4 | CREQ 110 | Engineering Drawing | 2 | 3 | | 5.00 |
| 5 | UREQ 112 | Human Rights and Democracy | 2 | | | 2.00 |
| 6 | PHYS 110 | Physics | 2 | 2 | | 5.00 |
| 7 | CIER 110 | Engineering Mechanics | 3 | | 1 | 5.00 |
| 8 | UREQ 113 | Arabic Language | 2 | | | 2.00 |
| Total | | | 17 | 10 | 1 | 30 |
| | างเมา | | | 28 | | 50 |

Level Two ...

| No. | CODE | SUBJECT | Hrs | Per V | Veek | ECTS |
|------|----------|-----------------------------------------|-----|--------|------|------|
| 110. | CODE | SUBJECT | Th | App | Tut | ECIS |
| 1 | CREQ 120 | Chemistry | 2 | 2 | | 4.00 |
| 2 | MATH 120 | Fundamentals of Engineering Mathematics | 3 | | 1 | 5.00 |
| 3 | CREQ 121 | Engineering Graphics | 2 | 2 | | 5.00 |
| 4 | CREQ 122 | Geology | 2 | 2 | | 5.00 |
| 5 | CIER 120 | Fundamentals of Static and Dynamic | 3 | | 1 | 5.00 |
| 6 | CIER 121 | Material Technology | 2 | 2 | | 4.00 |
| 7 | UREQ 120 | English Language | 2 | | | 2.00 |
| | Total | | | 16 8 2 | | |
| | Totai | | | 26 | | 30 |

Al-Nahrain University College of Engineering Department of Civil Engineering Study Plan for the B.Sc. Degree Course (2024-2025)

Second Year

First Semester ...

| No. | | SUBJECT | | Hrs Per Week | | | | |
|-------|----------|--------------------------------------|----|--------------|-----|------|--|--|
| 110. | CODE | SUBJECT | Th | App | Tut | ECTS | | |
| 1 | UREQ 210 | Computer 2 | 2 | 2 | | 3.00 | | |
| 2 | MATH 210 | Engineering Mathematics | 3 | | 1 | 5.00 | | |
| 3 | CIER 210 | Mechanics of Materials | 3 | | 1 | 5.00 | | |
| 4 | CIER 211 | Concrete Technology | 3 | 2 | | 5.00 | | |
| 5 | CIER 212 | Fluid Mechanics I | 2 | 2 | | 5.00 | | |
| 6 | UREQ 211 | Crimes of the Defunct Baath Party | 2 | | | 2.00 | | |
| 7 | CIER 213 | Surveying | 2 | 2 | | 5.00 | | |
| Total | | | 17 | 8 | 2 | 30 | | |
| | ı otal | | | 27 | | 30 | | |

❖ Second Semester ...

| No | CODE | SUBJECT - | Hrs | Per V | Veek | ECTS |
|-----|----------|------------------------|-----|-------|------|------|
| No. | CODE | | Th | App | Tut | EC15 |
| 1 | MATH 220 | Analytic Mathematics | 3 | | 1 | 5.00 |
| 2 | CREQ 220 | Engineering Statistics | 3 | | | 5.00 |
| 3 | CIER 220 | Building Construction | 2 | | 1 | 3.00 |
| 4 | CIER 221 | Mechanics of Solid | 3 | | 1 | 5.00 |
| 5 | CIER 222 | Geomatics | 2 | 2 | | 4.00 |
| 6 | CIER 223 | Fluid Mechanics II | 3 | 2 | | 4.00 |
| 7 | UREQ 220 | New Headway Plus | 2 | | | 2.00 |
| 8 | UREQ 221 | Arabic Language II | 2 | | | 2.00 |
| | | 20 | 4 | 3 | 30 | |
| | Total | | | 27 | | |

Al-Nahrain University College of Engineering Department of Civil Engineering Study Plan for the B.Sc. Degree Course (2024-2025)

Third Year

First Semester ...

| No. | CODE | SUBJECT | Hrs | Per W | eek | Units |
|-------|----------|----------------------------------|-----|-------|-----|-------|
| 110. | CODE | SOBOLET | Th | App | Tut | Cines |
| 1 | CIER 311 | Engineering Mathematics I | 3 | | | 3 |
| 2 | CIER 310 | Soil Mechanics I | 3 | 2 | | 4 |
| 3 | CIER 312 | Theory of Structures I | 3 | | 1 | 3 |
| 4 | CIER 313 | Reinforced Concrete Design I | 3 | | 1 | 3 |
| 5 | CIER 314 | Sanitary Engineering I | 2 | 2 | 1 | 3 |
| 6 | CIER 315 | Engineering Management & Economy | 3 | | | 3 |
| 7 | CIER 316 | Hydrology | 2 | | 1 | 2 |
| 8 | CIER 317 | Traffic Engineering | 2 | | 1 | 2 |
| T-4-1 | | 21 | 4 | 5 | 23 | |
| | Total | | | 30 | | 23 |

❖ Second Semester ...

| No. | CODE | SUBJECT - | Hrs Per Week | | Veek | Units |
|-------|----------|-------------------------------|--------------|-----|------|-------|
| 110. | CODE | | Th | App | Tut | Omits |
| 1. | UREQ 320 | English language III | 2 | | | 2 |
| 2. | CIER 321 | Engineering Mathematics II | 3 | | | 3 |
| 3. | TRAN#90 | Summer Training | | | | |
| 4. | CIER 320 | Soil Mechanics II | 3 | 2 | | 4 |
| 5. | CIER 322 | Theory of Structures II | 3 | | 1 | 3 |
| 6. | CIER 323 | Reinforced Concrete Design II | 3 | | 1 | 3 |
| 7. | CIER 324 | Sanitary Engineering II | 2 | 2 | 1 | 3 |
| | | | | | | |
| 8. | CIER 326 | Construction Methods | 2 | | 1 | 2 |
| 9. | CIER 327 | Hydraulics | 2 | | 1 | 2 |
| Total | | 20 | 4 | 5 | 22 | |
| | | | 29 | | 22 | |

Al-Nahrain University College of Engineering

Department of Civil Engineering Study Plan for the B.Sc. Degree Course (2024-2025)

Fourth Year

First Semester ...

| No. | CODE | SUBJECT | Hrs Per Week | | Units | |
|-------|----------|-------------------------------------------|--------------|-----|-------|----|
| 110. | CODE | Sebalei | Th | App | Tut | |
| .1 | UREQ 410 | English language IV | 2 | | | 2 |
| .2 | CREQ 410 | Project I | | 4 | | 2 |
| .3 | CIER 410 | Elective I | 3 | | | 3 |
| .4 | CIER 411 | Foundation Engineering I | 3 | | | 3 |
| .5 | CIER 412 | Transportation Engineering I | 1 | 2 | 1 | 2 |
| .6 | CIER 414 | Reinforced Concrete Design III | 3 | | 1 | 3 |
| .7 | CIER 413 | Steel Design I | 2 | | 2 | 3 |
| .8 | CIER 415 | Computer Application in Civil Engineering | 2 | | 1 | 2 |
| .9 | CIER 417 | Quantity Surveying | 3 | | | 3 |
| Total | | | 19 | 6 | 5 | 23 |
| | | | | 30 | | |

❖ <u>Second Semester</u> ...

| No. | CODE | SUBJECT | Hr | s Per V | Veek | 1 2 2 3 3 3 3 3 2 2 | | |
|------|----------|-------------------------------|----|---------|------|---------------------|--|--|
| 110. | CODE | SUBJECT | Th | App | Tut | | | |
| 1 | ETHC 420 | Professional Ethics | 1 | | | 1 | | |
| 2 | CREQ 420 | Project | | 4 | | 2 | | |
| 3 | CIER 420 | Elective II | 2 | | 1 | 2 | | |
| 4 | CIER 421 | Foundation Engineering II | 4 | | | 3 | | |
| 5 | CIER 422 | Transportation Engineering II | 2 | 2 | | 3 | | |
| 6 | CIER 424 | Reinforced Concrete Design IV | 3 | | 1 | 3 | | |
| 7 | CIER 423 | Steel Design II | 2 | | 2 | 3 | | |
| 8 | CIER 426 | Numerical Analysis | 2 | | 1 | 2 | | |
| | Total | | | 6 | 5 | 10 | | |
| | 1 0721 | | | 27 | | 19 | | |

Approved Electives:

- 1. Dynamic of Structure
- 2. Water Resources
- 3. Matrix Structural Analysis
- 4. Plumbing Engineering
- 5. Remote Sensing and GIS

- 6. Advanced Concrete Technology
- 7. Bridge Engineering
- 8. Environmental Engineering
- 9. Airport Engineering
- 10. Selected Topics