



Academic Form-38: PROGRAM MATRIX

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| Faculty | Engineering |
| Program | Civil Engineering |
| Award | Bachelor in Engineering |
| Credit Units | 69 |
| Academic Year | 2023/2024 |

| Level | Semester 1 | | | | | Semester 2 | | | | |
|-------|-------------|--|---------------|---------------|-------|-------------|--|---------------|---------------|-------|
| | Course Code | Course Name | Pre-requisite | Core/Elective | Units | Course Code | Course Name | Pre-requisite | Core/Elective | Units |
| 1 | ENGG1013 | Engineering Drawing and Computer drafting Communication Skills I | None | Core | 1 | ELEC1100 | Principles of Electrical Circuits | None | Core | 2 |
| | UNIR1100 | Mathematical Foundations | None | Core | 2 | MATH1100 | Calculus & Linear Algebra | MATH1000 | Core | 2 |
| | MATH1000 | General Chemistry | Set 3 Math | Core | 2 | ENGG1010 | Applied Mechanics | None | Core | 2 |
| | CHEM1020 | Introduction to Programming | None | Core | 2 | ENGG1023 | Engineering of Materials | None | Core | 2 |
| | COMP1500 | Strength of Materials | None | Core | 2 | UNIR1001 | Oman and Islamic Culture | None | Core | 1 |
| 2 | CIVE2310 | Intro to Civil Engineering & Environmental Issues | ENGG1010 | Core | 2 | CIVE2120 | Fundamental of Fluid Mechanics | None | Core | 2 |
| | CIVE2610 | Surveying | None | Core | 2 | CIVE2210 | Fundamentals of Engineering Geology & Soil Mechanics | None | Core | 2 |
| | CIVE2710 | | None | Core | 2 | CIVE2320 | Introduction to Structural Analysis and Design | ENGG1010 | Core | 2 |



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| | MATH2100 | Calculus & Statistics | MATH1100 | Core | 2 | UNIR2100 | Communication Skills II | None | Core | 2 |
| | UNIR2001 | Entrepreneurship | None | Core | 2 | UNIR1002 | Arabic Language Skills | None | Core | 1 |
| 3 | CIVE3340 | Structural Analysis | CIVE2320 | Core | 2 | CIVE3350 | Design of Reinforced Concrete Structures | CIVE2320 | Core | 2 |
| | CIVE3110 | Hydrology | None | Core | 2 | CIVE3410 | Traffic and Transportation Engineering | None | Core | 2 |
| | CIVE3360 | Structural Steel Design | CIVE2320 | Core | 2 | CIVE3220 | Geotechnical Engineering | CIVE2210 | Core | 2 |
| | ENGG3700 | Numerical Analysis & Optimization | None | Core | 2 | UNIR3100 | Communication Skills III | None | Core | 2 |
| 4 | CIVE4510A | Civil Engineering Design | CIVE3350 | Core | 2 | CIVE4510B | Civil Engineering Design | CIVE3350 | Core | 2 |
| | CIVE4130 | Water Resources Engineering | None | Core | 2 | CIVE4140 | Waste Treatment Process | None | Core | 2 |
| | CIVE4810 | Project Management | None | Core | 2 | CIVE4420 | Highway Engineering and Road Safety | None | Core | 2 |
| | ENGG4801A | Thesis Project | None | Core | 2 | ENGG4801B | Thesis Project | None | Core | 2 |