

# BEng Honours Degree in Construction Engineering

# Engineering a vision into a reality

Travel any highway or cross any bridge, walk into a building or shop in a mall and the reality of construction engineering becomes immediately apparent. Architects envision exciting designs, but it is the challenge of construction engineering to make those visions concrete. This involves a set of practical and intellectual skills and a strong team-working ethos.

# **Programme**

To cater for the national and international demand for skilled human resources within the construction industry, this programme has been designed to provide you with a strong knowledge and understanding of your subject, complemented with intellectual, professional, practical and transferable skills associated with construction engineering. Areas covered in the programme include construction techniques, heavy construction equipment and machinery, building services, restoration and rehabilitation. contract administration and risk analysis. It also covers the management of new and existing structures from small projects to so-called 'mega-structures' such as skyscrapers, roads, bridges, tunnels, railways, airports, dams

and shopping malls. Modules focusing on design (for example concrete design and steel structure design) are also included in the programme.

#### **Placement**

Placement opportunities are provided in companies involved in industrial projects and the construction of housing complexes, business centres, shopping malls,



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bridges, roads, railways, harbours, dams and airports.

### **Career Opportunities**

There are many career options in Oman and abroad, both in the public and private sectors, stemming from this programme. Employment on graduation is possible, for example, in construction engineering contracting; health, safety and environment consultancy; project risk analysis; national and local government agency projects (in areas including water supply, sewerage, road and bridge design and maintenance, building regulations, compliance and assessment of building services by laboratory analysis).

#### **Awards**

Students who successfully complete this programme will be eligible

## **Modules**

Credits	Level 1 – Total of 140 Credits
20	Applicable Mathematics 1
20	Technical Communication
20	Construction Materials and Measurements
10	Materials and Measurements Laboratory
20	Construction Technology
20	Environmental Sciences
20	Engineering Mechanics
10	Engineering Drawing Laboratory
	English for Engineers 1

Credits	Level 3 – Total of 140 Credits
20	Entrepreneurial Skills development
20	Heavy Construction Equipment and Machinery
20	Design of Steel Structures
10	Structural Detailing
20	Health and Safety in Construction
20	Construction Cost Estimating
20	Geotechnical Engineering
10	Industrial Training

for an internationally recognised Honours Degree awarded by Glasgow Caledonian University, Scotland, UK. Two exit options are available as given below:

- On successful completion of Level 2: Award of University Diploma
- On successful completion

of Level 4: Award of BEng Honours Degree

The Diploma awarded after Level 2 is equivalent to Diploma (Oman) and BEng Honours Degree awarded after Level 4 is equivalent to Bachelor Degree in Engineering (Oman), conforming to the Oman Qualifications Framework.



Credits	Level 2– Total of 140 Credits	
20	Applicable Mathematics 2	
20	Design of RCC Structures	
20	Surveying	
10	Surveying Laboratory	
20	Engineering Economics for Construction Engineers	
20	Building Performance and Services	
20	Employability Skills Development	
10	Building Performance Laboratory	
	English for Engineers 2	
Industry Orientation Programme Exit with Diploma		

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Credits	Level 4 – Total of 140 Credits	
20	Contract Administration and Building Regulations	
20	Project Management	
10	Research Methodology	
20	Advanced Construction Technology	
20	Rehabilitation of Structures	
20	Project	
10	Industry Based Project	
20	Elective	
Industry Orientation Draggerons		

Industry Orientation Programme Exit with Bachelor of Engineering (Honours) in Construction Engineering



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