

# BEng Honours Degree in Electronic and Instrumentation **Engineering**

# Fully charged for the future

This programme aims to produce professional engineers with the skills, expertise and knowledge to apply electronic and instrumentation systems to a wide range of engineering situations. It will equip you with skills via a broad education in electronic and instrumentation engineering with an emphasis on the application of theory into practice.

### **Programme**

Modern electronics is the prime mover of all industrial development and holds an important place in the realm of engineering practice. The major strength of the Electronic and Instrumentation Engineering Programme lies in its faculty, the basic philosophy on which the curriculum is built, and the outstanding laboratory facilities. Students work in a variety of areas including analogue and digital electronics, network analysis and synthesis, digital and analogue system design, signal processing, control system and instrumentation. There is a strong demand for instrumentation engineers in national and multinational process and manufacturing industries as well as in various ministries, government

institutions and consulting organisations.

#### **Placement**

As part of this programme, placement opportunities are available in various private and government sectors, such as petroleum development companies, oil and gas companies, hospitals, defence, and aviation.



**Oman Contact:** 

Caledonian College of Engineering PO Box 2322, CPO Seeb 111, Sultanate of Oman Tel: 00968 98266600, Fax: +968 24535675, Email: admissions@caledonian.edu.om

(1) Eng: Husham Reyadh, icsusn@gmail.com, 07715202451 (2) Eng: Mustafa Tahseen, bicsus@gmail.com, Tel: 07702568370 (3) Dr. Bassam Saleh Mahdi, dr.bassam@ahrtd.com, Tel: 07717929084, 07823390049

### **Career Opportunities**

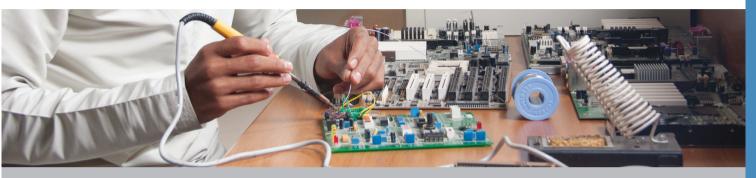
This programme offers a number of career options in electronic or instrumentation areas such as microcontroller applications, analogue and digital system design, signal processing, system modelling, control and instrumentation systems.

#### **Awards**

Students who successfully complete this programme will be eligible 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.



## **Modules**

Credits	Level 1 – Total of 140 Credits
20	Computer Programming
20	Circuit Theory and Analysis
20	Technical Communication
10	Physics
20	Electro-Mechanical Workshop
20	Technical Mathematics 1
20	Mechanical Principles
10	Energy and Environmental Science
	English for Engineers - I

Credits	Level 3 – Total of 140 Credits
20	Entrepreneurial Skills Development
20	Control Systems
20	Signals and Systems
10	Control Systems Lab
20	Advanced Mathematics
20	Non Technical Elective
20	Microcontroller and Applications
10	Microcontroller Lab

Credits	Level 2– Total of 140 Credits
20	Analogue Electronics
20	Digital Electronics
20	Technical Mathematics 2
10	Electronics Lab
20	Employability Skills Development
20	Electrical and Electronic Measurements
20	Sensors and Transducers
10	Instrumentation Lab
	English for Engineers –II Industry Orientation Prog Exit with Diploma

Credits	Level 4 – Total of 140 Credits	
20	Electronic Design	
20	Industrial Instrumentation	
20	Process Control Technology	
10	Research Methodology	
10	Industrial Internship	
20	Technical Project	
20	Industrial Studies	
20	Technical Elective	
Exit with Bachelor of Engineering		

Exit with Bachelor of Engineering (Honours) in Electronic and Instrumentation Engineering



**Oman Contact:** 

Caledonian College of Engineering PO Box 2322, CPO Seeb 111, Sultanate of Oman Tel: 00968 98266600, Fax: +968 24535675, Email: admissions@caledonian.edu.om