



BSc Degree in Chemical Engineering

Turning concepts into reality

Chemical engineering originated with a need to transform raw materials to useful products. Chemical engineers use the principles of engineering analysis and knowledge of chemistry to design, build and operate processes that provide society with items such as petroleum and petrochemical products, pharmaceuticals, food products and computer chips.

Programme

This programme educates students in chemical engineering by promoting interdisciplinary collaboration with other fields. At the end of this programme, you can expect to become a well-trained, competent engineer, capable of responding to the current and future needs of the chemical and process industries.

Placement

The programme is reinforced with structured industrial visits and placement opportunities. While working during the placement, students undertake many assignments to reflect their academic studies related to the context of a process plant. Locally the college is supported by a large number of chemical industries and

other companies to allow for an enriching placement experience.

Career Opportunities

Career opportunities exist in a wide variety of industries including

refineries, petrochemicals, polymers, water resources development and recycling, process design and simulation, natural gas processing, desalination, air and water pollution control, research and



development, environmental health and safety, process industries, fertilisers, cement, biotechnology and pharmaceuticals, pulp and paper and food processing industries.

Modules

Credits	Level 1 – Total of 34 Credits
3	Introduction to Engineering Computing
3	English Skill Development -1
3	Chemical Science
3	Engineering Materials
3	Professional Development for Engineers-1
2	Graphical Communication and Industry
4	Engineering Mathematics 1
3	Engineering Physics
2	<i>English Skills Development-2</i>
3	<i>Chemical Engineering Principles</i>
4	<i>Engineering Mechanics</i>
1	<i>Engineering Practice</i>

Credits	Level 3 – Total of 35 Credits
3	Professional Development for Engineers - 3
4	Mass Transfer - I
4	Chemical Reaction Engineering
4	Process Instrumentation
3	Health & Safety Management
4	Applied Mathematics
4	Mass Transfer – II
4	Chemical Process Dynamics & Control
3	Omani History and Civilisation (Elective 1 HSS)
2	Chemical Technology

Awards

Students who successfully complete this programme will be eligible for an internationally recognised Bachelor of Science Degree awarded by VIT University, Vellore,

India. The BSc Degree awarded after Level 4 is equivalent to the Bachelor Degree in Engineering (Oman), conforming to the Oman Qualifications Framework.



Credits	Level 2– Total of 35 Credits
4	Engineering Mathematics 2
4	Fluid Mechanics
4	Chemical Engineering Thermodynamics
3	Chemical Process Calculations
3	Organic Chemistry
3	Professional Development for Engineers - 2
4	Electrical Science
4	Heat Transfer
3	Analytical Chemistry
3	Mechanical Separations

Credits	Level 4 – Total of 36 Credits
8	Technical Project
4	Process Equipment Design
3	Engineering Economics
3	Elective -I
3	Islamic Culture (Elective 2-HSS)
4	Process Modelling and Simulation in Chemical Eng
4	Environmental Engineering
3	Elective-II
4	Internship/Seminar

Bachelor of Science in Chemical Engineering



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