

2. Chemical Engineering

YEAR 1

Semester 1	Semester 2
ENCH1EA Chemical Engineering Principles 1 (8)	ENCH1EB Chemical Engineering Principles 2 (8)
ENCH1TC Tech. Communication for Engineers (8)	CHEM120 Chemical Reactivity (16) or CHEM171 Chemical Engineering Chemistry 2 (16)
CHEM110 General Principles of Chemistry (16) or CHEM161 Chemical Engineering Chem. 1 (16)	MATH141 Mathematics 1B (Eng) (16)
MATH131 Mathematics 1A (Eng) (16)	MATH142 Applied Mathematics 1B (Eng) (16)
MATH132 Applied Mathematics 1A (Eng) (16)	PHYS162 Chemical Engineering Physics 1B (16)
PHYS161 Chemical Engineering Physics 1A (8)	

YEAR 2

Semester 1	Semester 2
CHEM241 Appl. Organic Chem for Chem Eng (8)	CHEM251 Appl Physical Chem for Chem Eng (8)
ENCH2MB Mass and Energy Balances (8)	ENCH2EF Chemical Engineering Fundamentals (16)
ENCH2OM Oil & Mineral Processing (8)	ENCH2ET Exptl Techniques & Measurements (16)
ENEL2CM Applied Computer Methods (8)	ENCH2MS Materials of Construction (8)
ENEL2EE Electrical & Electronic Engineering (16)	ENCH2TD Thermodynamics 1 (8)
ENME1DR Engineering Drawing (8)	MATH248 Mathematics 2B (Eng) (16)
MATH238 Mathematics 2A (Eng) (16)	ENCH2WS Workshop Training (DP)

YEAR 3

Semester 1	Semester 2
CHEM261 Appl Inorganic Chem for Chem Eng (8)	ENCH3CP Chemical Engineering Practicals 2 (8)
ENCH3FM Fluid Mechanics (8)	ENCH3ED Chemical Engineering Design (16)
ENCH3HE Heat Transfer (16)	ENCH3MT Mass Transfer (16)
ENCH3MP Materials Processing (8)	ENCH3PO Process Modelling & Optimization (16)
ENCH3SL Safety & Loss Prevention (8)	ENCH3RT Reactor Technology Fundamentals (16)
ENCH3TH Thermodynamics 2 (8)	
MATH354 Mathematics 3A (Eng) (8)	
STAT370 Engineering Statistics (8)	

YEAR 4

Semester 1	Semester 2
ENCH4DC Process Dynamics and Control (16)	ENCH4DP Design Project (32)
ENCH4LA Laboratory/Industry Project 1 (16)	ENCH4PE Projects and the Environment (8)
ENCH4ML Eng Management & Labour Relns (8)	ENEL4EB Engineering Business (8)
ENCH4MT Advanced Mass Transfer (8)	ENCH4VW Practical Vacation Work (12 weeks) (DP)
ENCH4RT Applied Reactor Technology (8)	

<p>Plus one of the following modules (Engineering modules):</p> <p>ENCH4CA Chemical Engineering Topics 1 (8)</p> <p>ENCH4CG Coal Technology and Gasification (8)</p> <p>ENCH4MP Mineral Processing (8)</p> <p>ENCH4WP Wood Pulping Technology (8)</p> <p>ENCH4BG Biorefinery Concept & Green Technologies (8)</p>	<p>Plus one of the following modules (Engineering modules):</p> <p>ENCH4AB Applied Biochemical Engineering (8)</p> <p>ENCH4CB Chemical Engineering Topics 2 (8)</p> <p>ENCH4EI Environmental Impact Assessment (8)</p> <p>ENCH4EM Extractive Metallurgy (8)</p> <p>ENCH4LB Laboratory/Industry Project 2 (8)</p> <p>ENCH4PM Paper Making Technology (8)</p> <p>ENCH4PP Petroleum & Synthetic Fuel Process (8)</p>
<p>ZULUN101 Basic isiZulu Language Studies A or Elective module (complementary studies)* (16)</p>	<p>Elective modules 1(complementary studies)* (16)</p>

*Registration for elective modules can be done only with the approval of Dean and Head of School.