

PROGRAMME STRUCTURE

* denotes core modules

Level 1 Semester 1			
Code	Module Description	Pre-requisite	Credits
*HMIE111	Engineering Drawing		4
HGEN116	Business Communication		4
*HCHE111	Principles of Chemical Engineering		4
*HGEN114	Engineering Mathematics I		4
HGEN127	Electricity and Magnetism		4
*HGEN115	Introduction to computers and computer applications		4
Level 1 Semester 2			
HGEN126	Introduction to Computer Programming		4
*HMIE121	Fundamentals of Geology		4
*HGEN124	Engineering Mathematics II	(HGEN 114)	4
HGEN117	Engineering Mechanics		4
*HCHE226	Strength of materials		4
*HCHE126	Workshop Practice		4
Level 2 Semester 1			
HMIE212	Innovation		4
*HMIE213	Mineral Processing 1		4
*HMIE214	Mine Machinery and Materials Handling		4
*HMIE215	Introduction to Mining and Metallurgy I		4
*HGEN214	Engineering Mathematics III		4
*HMIE216	Underground Mining		4
*HMIE217	Mechanical Engineering Design		4
Level 2 Semester 2			
*HMIE221	Principles of Electrical Engineering		4
HCHE125	Thermodynamics		4
*HGEN224	Engineering Mathematics IV		4
*HMIE 222	Mine Survey and GIS		4
*HMIE 224	Surface Mining	(HMIE121)	4
*HMIE225	Thermofluids		4
Level 3 Semester 1			
*HMIE 311	Rock Mechanics		4
*HMIE312	Mining Geology		4
*HMIE313	Engineering Economics		4
*HMIE315	Mineral Processing Laboratory		4
HMIE316	Health, Safety and Risk Management		4
*HGEN225	Engineering Mathematics V		4

Level 3 Semester 2		
*HMIE321	Mineral Processing II	4
*HMIE322	Mineral economics	4
*HMIE323	Rock Breaking	4
*HGEN524	Professional Ethics and Practice	4
*HMIE325	Coal Mining Methods	4
*HMIE326	Mining Laws and Regulations	4
Level 4 Semester 1 and 2: Work Related Learning		
*HMIE 401	Work Related Learning Report	15
*HMIE 402	Academic Supervisor's Report	15
*HMIE 404	Employer's Assessment Report	10
Level 5 Semester 1		
*HMIE511	Mine Ventilation	4
*HMIE 512	Engineering Geology	4
HMIE513	Mineral Processing Design, Simulation and Control	4
HMIE514	Principles of Materials Corrosion	4
*HMIE515	Mine Design and Planning	4
HMIE516	Marketing and Transportation of Minerals	4
Level 5 Semester 2		
HMIE 521	Technological entrepreneurship	4
*HMIE522	Dissertation	8
HCHE525	Environmental Management and risk assessment	4
*HMIE523	Mine Management	4