

BSC IN INDUSTRIAL CHEMISTRY PROGRAMME

Summary of Courses

YEAR 1: Semester I

CORE COURSES

Course Code	Course Title	L	P	CH	CU
ICH 1101	INTRODUCTION TO COMPUTING	30	30	45	3
ICH 1102	INTRODUCTION TO INDUSTRIAL CHEMISTRY	30	30	45	3
ICH 1103	MATHEMATICS FOR CHEMICAL ENGINEERS I	45	0	15	3
ICH 1104	INDUSTRIAL STOICHIOMETRY	45	0	45	3
ICH 1105	FUNDAMENTALS OF ELECTRICAL ENGINEERING	30	0	30	2
ICH 1106	DESCRIPTIVE GEOMETRY	15	30	30	2
CHM 1101	BASIC INORGANIC CHEMISTRY	30	0	30	2
CHM 1102	BASIC PHYSICAL CHEMISTRY	45	0	45	3
CHM	BASIC PHYSICAL/INORGANIC PRACTICALS	0	60	30	2
TOTAL CU					23

SEMESTER II

CORE COURSES

Course Code	Course Title	L	P	CH	CU
ICH 1206	FLUID MECHANICS	45	0	45	3
ICH 1207	HEAT TRANSFER	45	0	45	3
ICH 1208	BASIC INDUSTRIAL DRAWING	15	30	30	2
ICH 1209	BASIC THERMODYNAMICS	45	0	45	3
MTH 1202	ELEMENTS OF STATISTICS & PROBABILITIES	45	0	45	3
CHM 1205	BASIC ORGANIC CHEMISTRY	45	60	75	5
TOTAL CU					19

Recess Term
CORE COURSE

Course Code	Course Title	L	P	CH	CU
ICH 1311	WORKSHOP PRACTICE	0	150	75	5

Year 2
Semester I

CORE COURSES

Course Code	Course Title	L	P	CH	CU
ICH 2112	MASS TRANSFER I	30	0	30	2
ICH 2113	MATHEMATICS FOR CHEMICAL ENGINEERS II	45	0	45	3
ICH 2114	INTRODUCTORY ECONOMICS	30	0	30	2
ICH 2115	CHEMICAL REACTION ENGINEERING	45	0	45	3
ICH 2116	ENERGY TECHNOLOGY	30	30	45	3
ICH 2117	INDUSTRIAL MANAGEMENT	30	30	45	3
CHM 2111	ELEMENTS OF ANALYTICAL CHEMISTRY	30	60	60	4
		30	60	60	4
TOTAL CU					24

ELECTIVES

At least one course must be selected.

Course Code	Course Title	L	P	CH	CU
CHM 2112	BONDING AND PERIODICITY	45	0	45	3
CHM 2113	POLYFUNCTIONAL AND CYCLIC ALIPHATICS	30	60	60	4
CHM 2109	AROMATIC CHEMISTRY	30	0	30	2

Semester II

CORE COURSES

Course Code	Course Title	L	P	CH	CU
ICH 2218	CHEMICAL ENGINEERING THERMODYNAMICS	45	0	45	3
ICH 2219	CHEMICAL ENGINEERING ECONOMICS	45	0	45	3
ICH 2221	MATERIALS SCIENCE	30	0	30	2
ICH 2222	INDUSTRIAL MICROBIOLOGY	30	60	60	4
ICH 2223	UNIT OPERATIONS LABORATORY	0	60	30	2
CHM 22	TRANSITION METAL CHEMISTRY	30	0	30	2
CHM 2218	BASIC ENVIRONMENTAL CHEMISTRY	30	0	30	2
TOTAL CU					20

ELECTIVE COURSES

At least one course must be selected.

Course Code	Course Title	L	P	CH	CU
CHM 2213	ELECTROCHEMISTRY	30	0	30	2
CHM 2222	THERMODYNAMICS AND KINETICS	30	60	60	4
CHM 2223	INTRODUCTORY SPECTROSCOPY	30	0	30	2

Recess Term

CORE COURSE

Course Code	Course Title	L	P	CH	CU
ICH 2301	FIELD ATTACHMENT	0	150	75	5

Year 3

Semester I

CORE COURSES

Course Code	Course Title	L	P	CH	CU
ICH 3124	REACTOR DESIGN	30	30	45	3
ICH 3125	CHEMICAL PLANT DESIGN	45	0	45	3
ICH 3126	SEPARATION PROCESSES	45	0	45	3
ICH 3127	BIOTECHNOLOGY	30	30	45	3
ICH 3128	MATHEMATICS FOR CHEMICAL ENGINEERS III	45	30	60	4
ICH 3129	MASS TRANSFER II	30	0	30	2
TOTAL CU					18

ELECTIVE COURSES

Elective is voluntary

Course Code	Course Title	L	P	CH	CU
CHM 3128	ORGANOMETALLIC AND BIOINORGANIC CHEMISTRY	30	0	30	2

Semester II

CORE COURSES

Course Code	Course Title	L	P	CH	CU
ICH 3230	PROCESS CONTROL AND ANALYSIS	30	30	45	3
ICH 3231	TRANSPORT PHENOMENA	30	0	30	2
ICH 3233	INORGANIC CHEMICAL TECHNOLOGY	30	30	45	3
ICH 3234		30	30	45	3
ICH 3235	ORGANIC CHEMICAL TECHNOLOGY	30	30	45	3
ICH 3236	INDUSTRIAL WASTE MANAGEMENT	30	30	45	3
ICH 3237	ELECTROCHEMICAL & ELECTROTHERMAL PROCESSES CLEANER PRODUCTION	45	0	45	3
TOTAL CU					20