

CHEMICAL ENGINEERING UNDERGRADUATE PROGRAM

SEMESTER	I		II		III		IV		V		VI		VII		VIII	
CYCLE	8A	8B	8A	8B	8A	8B	8A	8B	8A	8B	8A	8B	8A	8B	8A	8B
Workshop									Probability and Statistics I Design of Experiments IQYA 2042 2 Design of Experiment Compl. IQYA 2042L 0		Chemical Reaction Engineering Chemical Systems Model Computational Tools 1 IQYA3043 2 Computational Tools 1 Lab. IQYA 3043L 0		Computational Tools 1 Computational Tools 2 IQYA 3044 2 Computational Tools 2 Lab IQYA 3044L 0		Computational Tools 1 Optimization Methods IQYA 3045 2 Optimization Methods Lab IQYA 3045L 0	
PBL - Project/ Problem Based Learning	Introduction to Integrated Design of Products and Processes IQYA 1031 3 Introduction to Integrated Design of Products and Processes Lab IQYA 1031L 0 Introduction to Integrated Design of Products and Processes Complementary IQYA 1031T 0								Macroscopic Transport Phenomena Physics I Integrated Project 2 IQYA 2032 3 Integrated Project 2 Laboratory IQYA 2032L 0 Integrated Project 2 Complementary IQYA 2032T 0		Molecular Trans. Phenom. Design of Experiment Integrated Project 3 IQYA 3033 2 Integrated Project 3 Lab. IQYA 3033L 0	Chem Reaction Engineering Investment Decision Analysis Integrated Project 4 IQYA 3034 4 Integrated Project 4 Workshop IQYA 3034L 0		Project Seminar Integrated Project 2 Integrated Project 3 Investment Decision Analysis Chem Reaction Eng. IQYA 3051 4		
Courses	Qualifying Exam or Precalculus Differential Calculus MATE 1203 3 Chemistry QUIM 1103 3 Chemistry Laboratory QUIM 1104 0 Writing I ESCR 1101 2 Writing II ESCR 1102 2 Introduction to Programming ISIS 1221 3	Mass Balances IQYA 2011 2 Mass Balances Complementary IQYA 2011L 0 Differential Calculus Integral Calculus and Diff Eqs. MATE 1214 3 Chemistry Applications QUIM 1105 3 Chemistry Applications Laboratory QUIM 1106 0 Physics I FISI 1518 3 Thermodynamics IQYA 2020 3 Thermodynamics Laboratory IQYA 2020L 0 Thermodynamic Complementary IQYA 2020T 0	Mass Balances IQYA 2011 2 Energy Balances IQYA 2012 2 Energy Balances Complementary IQYA 2012L 0 Differential Calculus Linear Algebra MATE 1105 3 Chemistry Applications Fundamental of Chemical Analysis QUIM 1618 3 Fundamental of Chemical Analysis Lab. QUIM 1619 0 Physics II FISI 1528 3 Cell Biology MBIO 1100 3 Cell Biology Laboratory MBIO 1101 0	Thermodynamics Energy Balances Integral Calculus and Diff Eqs. Linear Algebra Macroscopic Transport Phenomena IQYA 2110 2 Macroscopic Trans. Phenomena Lab. IQYA 2110L 0 Differential Calculus Vector Calculus MATE 1207 3 Integral Calculus Linear Algebra Probability and Statistics I IIND 2106 3 Probability and Statistics I Complementary IIND 2106T 0 Introduction to Integrated Design of Products and Processes Investment Decision Analysis IIND 2401 3 Thermodynamic Writing II Phase and Chemical Equilibria IQYA 2021 3 Phase and Chemical Equilibria Comp. IQYA 2021L 0	Thermodynamics Energy Balances Integral Calculus and Diff Eqs. Linear Algebra Microscopic Transport Phenomena IQYA 2111 2 Microscopic Transport Phenomena Lab. IQYA 2111L 0 Phase and Chemical Equilibria Energy Balances Chemical Systems Modelling IQYA 2400 3 Constitutional Law and Democracy DERE 1300 3 Phase and Chemical Equilibria Energy Balances Chemical Reaction Engineering IQYA 2300 3 Chemical Reaction Engineering Lab. IQYA 2300L 0 Chemical Reaction Engineering Comp. IQYA 2300T 0	Macroscopic Transport Phenomena Molecular Transport Phenomena IQYA 2112 2 Molecular Transport Phenomena Lab. IQYA 2112L 0 Elective Che 1 IQYA 3XXX 2 Elective Che 2 IQYA 3XXX 2 Elective: Science & Math XXXX XXXX 3	Design of Experiments Chem Reactions Eng Chem. Systems Modelling Molecular Transport Phenomena Project Seminar IQYA 3050 1 Elective Che 3 IQYA 3XXX 2 Elective Che 4 IQYA 3XXX 2 Elective Engineering Fundamentals XXXX XXXX 3 CLE 1 XXXX XXXX 3	Elective Che 5 IQYA 3XXX 2 Elective Che 6 IQYA 3XXX 2 Elective Non Che XXXX XXXX 3 CLE 2 XXXX XXXX 3								
Basic Cycle			CBU 1 CBPC XXXX 2		CBU 2 CBCA XXXX 2		CBU 3 CBCO XXXX 2		CBU 4 CBCC 1177 2		CBU 5 CBXX XXXX 2	CBU 6 CBXX XXXX 2			CBU 7 CBXX XXXX 2	

———> Pre-requisite
> Co-requisite

Additional Requirements: Two credits with an ethics training component (Epsilon Course) and two courses with an intensive academic writing