

Master of Engineering (MEng) – Course Requirements

Reactions and Process Systems Engineering (RP)

CORE COURSES (SELECT 1 FROM EACH CATEGORY)		
Category 1: CBE 9450 – Advanced Chemical Reaction Engineering		
Category 2: CBE 9115 – Fundamentals of Heat & Mass Transfer; OR CBE 9350 – Physical Principles of Environmental Engineering		
Category 3: CBE 9170 – Mathematical Methods in Engineering; OR CBE 9455 – Advanced Polymerization Engineering; OR CBE 9551 – Advanced Design in Fluidized Bed Reactors		
PROFESSIONAL ENGINEERING COURSES (SELECT 2 COURSES ONLY – TAUGHT IN SUMMER TERM ONLY)		
See John M. Thompson Centre for Engineering Leadership and Innovation website for list of all ELI courses. Any two ELI courses are acceptable for the MEng program.		
ELECTIVE COURSES		
CBE 9110 – Chemical Kinetics & Catalysis (Non-Eng Bkgnd)	CBE 9112 – Design & Analysis Principles (Non-Eng. Bkgnd)	CBE 9115 – Fundamentals of Heat & Mass Transfer
CBE 9150 - Advanced Chemical Engineering Thermodynamics	CBE 9155 – Advanced Fluid Mechanics	CBE 9132 – Energy & Fuel Production Systems
CBE 9160 - Transport Processes	CBE 9170 - Mathematical Methods in Engineering	CBE 9180 - Instrumental Methods of Analysis
CBE 9190 - Statistical Process Analysis	CBE 9211 - Fundamentals of Biochemical Eng.	CBE 9241 - Nano-biotechnology
CBE 9250 - Advanced Biomaterials Engineering	CBE 9260 - Advanced Bioengineering and Biotechnology	CBE 9263 - Biosensors: Principles and Applications
CBE 9312 - Air Pollution Control	CBE 9334 - Processes for Green Products	CBE 9350 - Physical Principles of Environmental Engineering
CBE 9417 - Industrial Catalysis	CBE 9424 - Computer Process Control	CBE 9450 - Advanced Chemical Reaction Engineering
CBE 9456 – Critical Review of Global Energy	CBE 9461 - Advanced Process Control	CBE 9544 - Pharmaceutical Manufacturing Processes
CBE 9550 - Advanced Particle and Fluidization Engineering	CBE 9561 - Adv. High Velocity Fluidization	
NOTES		
1. Graduate courses from other disciplines in the Faculties of Engineering may be taken as technical electives subject to the approval of the Associate-Chair, MEng.		
2. If a core course is not currently being offered, it will be replaced by another course subject to the program director approval.		