Western Engineering

Integrated Engineering and Business Option

September 2019 *(for students who entered HBA in September 2016 or earlier)*

Year 2:

Term A

AM 2270a	Applied Mathematics for Engineering II
CEE 2202a	Mechanics of Materials
ECE 2277a	Digital Logic Systems
MSE 2214a	Thermodynamics I
MME 2259a	Product Design and Development
Bus 2257	Accounting and Business Analysis

Term B

AM 2276b	Applied Mathematics for Electrical and Mechanical Engineering III
CBE 2221b	Fluid Flow
CBE 2291b	Computational Methods for Engineers
ECE 2238b	Introduction to Electrical Engineering
SS 2143b	Applied Statistics and Data Analysis for Engineers
Bus 2257	Accounting and Business Analysis

Year 3: HBA 1

Year 4:

Term A

ES 3331a	Engineering Innovation II: Managing the Innovation Process
CBE 2220a	Chemical Process Calculations
CBE 3322a	Heat Transfer Operations
CEE 2220a	Structural Theory and Design I
ECE 3374a	Introduction to Electronics for Mechanical Engineering
Bus 4569	Ivey Field Project

Term B

ES 3330b	Engineering Innovation I: New Venture Creation
MSE 2213b	Engineering Dynamics
MME 2285b	Engineering Experimentation
MSE 3360b	Finite Element Methods for Mechanical Engineering
ES 4498G	Engineering Ethics, Sustainable Development and the Law

Year 5:

Term A

ES 4499	Interdisciplinary Engineering Design Project
ES 4480a	Engineering Innovation III: Leadership and Corporate Entrepreneurship

0.5 technical elective

Bus 4505a	Global Macroeconomics for Managers

Bus 4521a/b or 4522a/b or 4523a/b

0.5 Business electives chosen from 4000 level Business courses.

Term B

ES 4499	Interdisciplinary Engineering Design Project

1.0 technical electives

1.5 Business electives chosen from 4000 level Business courses.

NOTES:

Important:

Students are responsible for ensuring they have the correct courses required for their degree. If you are unsure which courses you still need or if you see courses listed on the progression sheet that are no longer offered or are not offered in the term you see listed here, please contact your Academic Counsellor. For HBA related questions, please contact the Richard Ivey School of Business. For Engineering related questions, please contact your Academic Counsellor in Engineering.

Technical Elective List:

Some technical electives may not be offered in a given academic year. Consult the Department for accurate listing.

Chemical and Biochemical Engineering :	
CBE 2290a/b	Fundamentals of Biochemical and Environmental Engineering
CBE 3310a/b	Process Dynamics and Control
CBE 3324a/b	Mass Transfer Operations
CBE 4409a/b	Wastewater Treatment
CBE 4421a/b	Introduction to Biomaterials Engineering
Civil and Environmental Engineering:	
CEE 3348a/b	Project Management and Engineering Cases
CEE 3362a/b	Drinking Water Quality and Treatment
CEE 4405a/b	Air Pollution
CEE 4418a/b	Systems Approach for Civil and Environmental Engineering
CEE 4458a/b	Risk Analysis and Decision Making in Engineering
CEE 4465a/b	Environmental Design for Waste Disposal
CEE 4477a/b	Environmental Applications of Nanotechnology
Electrical and Computer Engineering:	
ECE 3349a/b	Introduction of VLSI
ECE 3375a/b	Microprocessors and Microcomputers
ECE 4436a/b	Networking: Principles, Protocols, and Architecture
ECE 4468a/b	Systems Optimization
SE 3314a/b	Computer Networks Applications
Mechanical and Materials Engineering:	
MME 3379a/b	Materials Selection
MME 3381a/b	Kinematics and Dynamics of Machines
MME 4452a/b	Robotics and Manufacturing Automation
MME 4473a/b	Computer Integrated Manufacturing (CIM)
MME 4487a/b	Mechatronic System Design
MME 4492a/b	Production Management for Engineers