Integrated Engineering and Business Option

September 2022 (for students who entered HBA in September 2017 to 2020)

Year 2:
Term A
NMM 2270a  Applied Mathematics for Engineering II (formerly AM 2270)
CEE 2202a  Mechanics of Materials
ECE 2277a  Digital Logic Systems
MSE 2214a  Thermodynamics I
IE 2297a  Integrated System Engineering & Design
Bus 2257  Accounting and Business Analysis

Term B
NMM 2276b  Applied Mathematics for Electrical and Mechanical Engineering III (formerly AM 2276)
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
ELI 3000a  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
ELI 3200b*  New Venture Creation
MSE 2213b  Engineering Dynamics
MME 2285b  Engineering Experimentation
MSE 3360b  Finite Element Methods for Mechanical Engineering
ELI 4110g  Engineering Ethics, Sustainable Development and the Law

Year 5:
Term A
IE 4499  Interdisciplinary Engineering Design Project
ELI 4100a  Engineering Leadership
0.5 technical elective
1.5 HBA required courses**

Term B
IE 4499  Interdisciplinary Engineering Design Project
Two 0.5 technical electives
1.5 Business electives chosen from 4000 level Business courses.

NOTES:
*New Venture Creation required 0.5 course: BA 4558 is an acceptable alternative to ES 3200 if taken prior to Year 4 as an overload elective, e.g. during intersession.

**1.5 HBA required courses:
- International Perspective Requirement: Business 4505a/b
- Corporations and Society Requirement: 0.5 course from Business Administration – Corporations and Society offered during the academic year to satisfy this requirement.
- Managerial Accounting Requirement: Business 4624a/b

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

<table>
<thead>
<tr>
<th>Chemical and Biochemical Engineering:</th>
<th>Civil and Environmental Engineering:</th>
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<tbody>
<tr>
<td>CBE 2290a/b  Fundamentals of Biochemical and Environmental Engineering</td>
<td>CEE 3348a/b  Project Management and Engineering Cases</td>
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<tr>
<td>CBE 3310a/b  Process Dynamics and Control</td>
<td>CEE 3362a/b  Drinking Water Quality and Treatment</td>
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<td>CBE 3324a/b  Mass Transfer Operations</td>
<td>CEE 4405a/b  Air Pollution</td>
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<td>CBE 4409a/b  Wastewater Treatment</td>
<td>CEE 4418a/b  Systems Approach for Civil and Environmental Engineering</td>
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<td>CBE 4421a/b  Introduction to Biomaterials Engineering</td>
<td>CEE 4458a/b  Risk Analysis and Decision Making in Engineering</td>
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<th>Civil and Environmental Engineering:</th>
<th>Electrical and Computer Engineering:</th>
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<tr>
<td>CEE 3349a/b  Environmental Applications of Nanotechnology</td>
<td>ECE 3349a/b  Introduction of VLSI</td>
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<td>CEE 3375a/b  Microprocessors and Microcomputers</td>
<td>ECE 4436a/b  Networking: Principles, Protocols, and Architecture</td>
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<td>ECE 4468a/b  Systems Optimization</td>
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<td>SE 3314a/b  Computer Networks Applications</td>
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