Academy of Interdisciplinary Studies

### Major Requirements

#### Engineering Fundamental Courses

- COMP 1029P: Python Programming Bridging Course
- PHYS 1112: Honors General Physics I
- PHYS 1312: Honors Calculus I
- MATH 2011: Honors Calculus II
- MATH 2012H: Calculus IB
- COMP 1021: Introduction to Computer Science
- COMP 1022P: Programming with C++

#### School Requirements

- ACCT 2010: Principles of Accounting I
- ACCT 2200: Principles of Accounting II

#### Additional Requirements

- BIEN 1010: Introduction to Chemical and Biological Engineering
- CENG 1000: Introduction to Engineering Design
- ENGG 2010: Engineering Seminar Series
- ISOM 2600: Introduction to Business Analytics

#### Major Required Courses and Electives

- BIEN 2310: Modeling for Chemical and Biological Engineering
- BIEN 2410: Cellular and Systems Physiology for Engineers
- BIEN 2610: Chemical Biology for Engineers
- BIEN 3310: Data Science for Biology and Medicine
- BIEN 3320: Introduction to Data Science

#### BBA in Marketing

- ISOM 2010: Introduction to Information Systems
- ISOM 2020: Business Ethics and the Individual
- ISOM 2120: Marketing Management
- ISOM 2500: Business Statistics
- ISOM 2700: Business Management

### Required credits for Engineering Fundamental Courses

- 15 credits

### Required credits for Major Required Courses and Electives

- 45 credits

### Required credits for School Requirements

- 7 credits

### Required credits for Additional Requirements

- 4 credits

### University CORE

- 12 credits

### Remarks on course(s):

- Students should take COMP1021 or COMP1022P or COMP2011 or COMP2012H and to waive ISOM 2010 and to waive ISOM 2020.
- Students should check their respective School and Department.

### Notes:

- COMP 1021 is a major pre-requisite.

### An Example on Student's Pathway (as of August 8, 2024)

<table>
<thead>
<tr>
<th>Year</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2024-25 Intake</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1 Fall</td>
<td>BIEN 1010</td>
<td>3</td>
</tr>
<tr>
<td>Year 1 Spring</td>
<td>CENG 1000</td>
<td>3</td>
</tr>
<tr>
<td>Year 2 Fall</td>
<td>COMP 1029P</td>
<td>3</td>
</tr>
<tr>
<td>Year 2 Spring</td>
<td>PHYS 1112</td>
<td>3</td>
</tr>
<tr>
<td>Year 3 Spring</td>
<td>PHYS 1312</td>
<td>3</td>
</tr>
<tr>
<td>Year 4 Fall</td>
<td>MATH 2011</td>
<td>3</td>
</tr>
<tr>
<td>Year 5 Spring</td>
<td>MATH 2012H</td>
<td>3</td>
</tr>
</tbody>
</table>

Sub-total for University CORE: 35 credits

### Remarks

- Students should refer to the Program Handbook/Bulletin or Faculty Handbook or Program Handbook or University Bulletin for the updated program requirements.
- Students should check their respective School and Department.