Course Flow (Basic Science & Compulsory courses)

Academic Year 2020

**Natural Science**
- **Fall**: Physics(I), Chemistry(I), General Biology(I)
- **Spring**: Physics(II), Chemistry(II), General Biology(II)

**Mathematics**
- **Fall**: Calculus(I), Linear Algebra, Intro. to Computers and Programming
- **Spring**: Calculus(II), Discrete Mathematics, Data Structures and Object-oriented Programming

**Computer Science**
- **Fall**: Intro. to Programming, Intro. to Computer Organization
- **Spring**: Intro. to Operating Systems, Computer Science Seminars

**Computer Science and Engineering Projects**
- **Academic Year 2**: Computer Science and Engineering Projects(I)
- **Academic Year 3**: Basic Programming (Verification test)
- **Academic Year 4**: Intro. to Operating Systems, Computer Science Seminars

Legend:
- **Compulsory**
- **Prerequisite**
Course Flow of Seven Topics Program

Academic Year 2020

**Topics**

<table>
<thead>
<tr>
<th>Academic Year 2</th>
<th>Academic Year 3</th>
<th>Academic Year 4</th>
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<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Fall</strong></td>
<td><strong>Fall</strong></td>
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<tr>
<td>Intro. to Database Systems</td>
<td>Intro. to Machine Learning</td>
<td>Artificial Intelligence Capstone</td>
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<td>Intro. to Artificial Intelligence</td>
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<td><strong>Spring</strong></td>
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<td>Intro. to Cryptography</td>
<td>Computer Security Capstone</td>
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<tr>
<td>Intro. to Cryptography</td>
<td>Intro. to Network Programming</td>
<td>Network Systems Capstone</td>
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**Legend**

- Program Compulsory
- Common Compulsory of 2 Programs

**AI and Data Science**

**Computer Security**

**Network Engineering**

**Multimedia Engineering**

**System Software**

**Software and Hardware Integration**

**Theory of Computation**

*Note: Choose four courses from the right column*