### Mathematics

<table>
<thead>
<tr>
<th>1st year</th>
<th>2nd year</th>
<th>3rd year</th>
<th>4th year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear Algebra</td>
<td>Number Theory</td>
<td>Abstract Algebra</td>
<td>Abstract Algebra 2</td>
</tr>
<tr>
<td>Set Theory</td>
<td>Topology</td>
<td>Topology 2</td>
<td>Applied Partial Differential Equations</td>
</tr>
<tr>
<td>Geometry</td>
<td>Differential Geometry</td>
<td>Differential Geometry 2</td>
<td>Applied Numerical Analysis</td>
</tr>
<tr>
<td>Calculus 1, 2</td>
<td>Applied Differential Equations</td>
<td>Partial Differential Equations</td>
<td>Numerical Analysis</td>
</tr>
<tr>
<td>Analysis</td>
<td>Analysis 2</td>
<td>Complex Analysis</td>
<td>Complex Analysis 2</td>
</tr>
<tr>
<td>Computational Applied Mathematics</td>
<td>Financial Mathematics</td>
<td>Applied Mathematics</td>
<td>Honorable Thesis</td>
</tr>
</tbody>
</table>

**Courses related to Cryptography and IT**
- Programming Basics and Experiments
- Informatics Theory
- Data Structure
- Honor Programming Algorithm
- Computer Structure
- Operating System
- Data Network
- System Simulation
- Computer Network

**Courses related to Insurance and Finance**
- Principles of Economics 1, 2
- Microeconomics
- Macroeconomics
- Fundamentals of Managements
- Fundamentals of Probability
- Principles of Accounting
- Financial Management
- Theory of Investment
- Introduction to Probabilistic Inference
- Insurance Mathematics 1, 2
- Management of Financial Institute

*“Linked” courses can be taken by both undergraduate students and graduate students*
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"Red marked" courses are necessary for graduate course (A student may choose one of the followings:
Differentiable Manifolds, Algebraic Topology, Theory of Numerical Analysis)