6-14: Computer Science, Economics, and Data Science

The 6-14 curriculum builds primarily on the Calculus II GIR; not all courses require a GIR as a pre-requisite

**Computer Science Subjects**

- Programming #1
  - 6.0001 or 6.S061
- Programming #2
  - 6.0002 or 6.009
- Discrete Math
  - 6.042
- Algorithms
  - 6.006
- Machine Learning
  - 6.036
- Advanced Algorithms
  - 6.046

**Economics and Data Science Subjects**

- Linear Algebra
  - 18.06
- Probability and Statistics
  - 6.041, 14.30, or 18.600
- Microeconomics
  - 14.01 or 14.03
- Econometrics
  - 14.32
- Networks and Optimization
  - 6.207, 6.215, or 15.053
- Networks and Optimization
  - 6.207, 6.215, or 15.053
- Intermediate Economics
  - 14.05, 14.18, or 14.33
- Econometrics
  - 14.32
- Data Science Elective
- Economics Theory Elective
- Data Science or Theory Elective
- Microeconomics
  - 14.01 or 14.03
- Econometrics
  - 14.32
- Networks and Optimization
  - 6.207, 6.215, or 15.053
- Networks and Optimization
  - 6.207, 6.215, or 15.053
- Intermediate Economics
  - 14.05, 14.18, or 14.33

**Communication**

- 6.UAT or 6.UAR
This is one possible roadmap for 6-14, but many permutations are possible. For instance, there is a significant amount of flexibility in what order students take their introductory courses.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
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</thead>
<tbody>
<tr>
<td>Semester 1:</td>
<td>Linear Algebra, Discrete Math, Programming #1 + #2 (if 6.0002)</td>
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<tr>
<td>Semester 2:</td>
<td>Probability and Statistics, Programming #2 (if 6.009), Microeconomics</td>
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<td>Semester 3:</td>
<td>Algorithms, Econometrics</td>
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<td>Semester 4:</td>
<td>Machine Learning, Advanced Algorithms</td>
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<td>Semester 5:</td>
<td>Intermediate Economics, Networks and Optimization, Elective #1</td>
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<tr>
<td>Semester 6:</td>
<td>Elective #2, Elective #3</td>
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</tbody>
</table>

The **communications class** is typically taken at some point during semesters 4-6.