MASTER'S DEGREES IN SUPPLY CHAIN MANAGEMENT

Supply Chain Management Program (http://catalog.mit.edu/interdisciplinary/graduate-programs/supply-chain-management)

**Master of Engineering in Supply Chain Management (Residential Program)**

The Master of Engineering in Supply Chain Management degree is an intensive, 10-month residential program requiring 90 units of graduate subjects. Students complete at least 78 units of required and elective subjects, and complete a 12-unit thesis. The subject requirements for this program are described below.

**Subject Requirements**

**Fall Required Subjects**

- SCM.250 Analytical Methods for Supply Chain Management (6 units)
- SCM.259 Written Communication for Supply Chain Management (3 units)
- SCM.260 Logistics Systems (12 units)
- SCM.264 Databases and Data Analysis for Supply Chain Management (6 units)
- SCM.280 Supply Chain Communications Workshop (1 unit)
- SCM.THG Graduate Thesis (3 units)

**IAP Required Subjects**

- SCM.254 Applied Programming and Data Analysis in Python (3 units)
- SCM.262 Leading Global Teams (3 units)

**Spring Required Subjects**

- SCM.263 Advanced Writing Workshop for SCM (3 units)
- SCM.281 Supply Chain Public Speaking Workshop (1 unit)
- SCM.295 Supply Chain Study Trek (1 unit)
- SCM.THG Graduate Thesis (9 units)
- 6.883 Advanced Topics in Artificial Intelligence (12 units)

**Finance Choices**

Select one of the following:

- SCM.251 Supply Chain Financial Analysis (9 units)
- 15.011 Economic Analysis for Business Decisions (9 units)
- 15.401 Managerial Finance (9 units)
- 15.521 Accounting Information for Decision Makers (9 units)
- 15.535 Business Analysis Using Financial Statements (9 units)

**Required Electives**

Select 18 units of electives, including at least 6 units in each of the following categories:

<table>
<thead>
<tr>
<th>Subject Requirements</th>
<th>Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCM Electives</td>
<td>9</td>
</tr>
<tr>
<td>Analysis Electives</td>
<td>6</td>
</tr>
<tr>
<td>Management Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

1. Students who have already successfully completed one of the required subjects at a graduate level elsewhere may petition to replace that subject with another elective.

2. With the approval of the instructor, students may substitute SCM.271 Logistics Systems Topics (3 units) plus 9 additional units of electives.

3. With the approval of the instructor, students may substitute SCM.274 Databases and Data Analysis Topics for Supply Chain Management (3 units) plus 3 additional units of electives.

4. With the permission of the program director, students may substitute SCM.253 Case Studies in Supply Chain Financial Analysis (3 units) plus 6 additional units of electives.

**Electives**

The subjects listed below are recommended but other choices can be approved by the graduate advisor.

**SCM Electives**

- SCM.261 Case Studies in Logistics and Supply Chain Management (9 units)
- SCM.266 Freight Transportation (6 units)
- SCM.283 Humanitarian Logistics (6 units)
- SCM.284 Humanitarian Logistics Project (6 units)
- SCM.290 Sustainable Logistics (6 units)
- SCM.291 Procurement Fundamentals (6 units)
- SCM.293 Urban Last-Mile Logistics (6 units)
- SCM.294 Digital Supply Chain Transformation (6 units)

**Analysis Electives**

- 1.200 Transportation: Foundations and Methods (12 units)
- 1.266 Supply Chain and Demand Analytics (6 units)
- 15.071 The Analytics Edge (12 units)
- 15.093 Optimization Methods (12 units)
- 15.774 The Analytics of Operations Management (12 units)
- 15.871 Introduction to System Dynamics (6 units)
- 15.872 System Dynamics II (6 units)
- 15.873 System Dynamics for Business and Policy (9 units)
- IDS.145 Data Mining: Finding the Models and Predictions that Create Value (6 units)
- IDS.147 Statistical Machine Learning and Data Science (12 units)
- IDS.305 Business and Operations Analytics (6 units)
### Master's Degrees in Supply Chain Management

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>IDS.330</td>
<td>Real Options for Product and Systems Design</td>
<td>6</td>
</tr>
<tr>
<td>IDS.333</td>
<td>Risk and Decision Analysis</td>
<td>6</td>
</tr>
<tr>
<td>IDS.338[J]</td>
<td>Multidisciplinary Design Optimization</td>
<td>12</td>
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</table>

### Management Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>15.025</td>
<td>Game Theory for Strategic Advantage</td>
<td>9</td>
</tr>
<tr>
<td>15.386</td>
<td>Leading in Ambiguity: Steering Through Strategic Inflection Points</td>
<td>6</td>
</tr>
<tr>
<td>15.390</td>
<td>New Enterprises</td>
<td>12</td>
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<tr>
<td>15.762[J]</td>
<td>Supply Chain Planning</td>
<td>6</td>
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<tr>
<td>15.763[J]</td>
<td>Manufacturing System and Supply Chain Design</td>
<td>6</td>
</tr>
<tr>
<td>15.768</td>
<td>Management of Services: Concepts, Design, and Delivery</td>
<td>9</td>
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<tr>
<td>15.769</td>
<td>Operations Strategy</td>
<td>9</td>
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<tr>
<td>15.784</td>
<td>Operations Laboratory</td>
<td>9</td>
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<tr>
<td>15.900</td>
<td>Competitive Strategy</td>
<td>9</td>
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<tr>
<td>15.904</td>
<td>Strategy and the CEO</td>
<td>6</td>
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