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

Master of Applied Science in Supply Chain Management (Residential Program)

The Master of Applied Science in Supply Chain Management degree is an intensive, 10-month residential program requiring 90 units of graduate subjects. Students complete at least 81 units of required and elective subjects and complete a 9-unit capstone project. The subject requirements for this program are described below.

Subject Requirements

**Fall Required Subjects**
- SCM.250 Analytical Methods for Supply Chain Management 6
- SCM.259 Written Communication for Supply Chain Management 3
- SCM.260[J] Logistics Systems 2 12
- SCM.264 Databases and Data Analysis for Supply Chain Management 6
- SCM.280 Supply Chain Communications Workshop 1
- SCM.800 Capstone Project in Supply Chain Management 3

**IAP Required Subjects**
- SCM.254 Applied Programming and Data Analysis in Python 3
- SCM.262 Leading Global Teams 3

**Spring Required Subjects**
- SCM.263 Advanced Writing Workshop for SCM 3
- SCM.281 Supply Chain Public Speaking Workshop 1
- SCM.295 Supply Chain Study Trek 1
- SCM.800 Capstone Project in Supply Chain Management 3

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

**Analysis Electives**
- 1.200[J] Transportation: Foundations and Methods 12
- 1.266 Supply Chain and Demand Analytics 6
- 15.071 The Analytics Edge 12
- 15.774 The Analytics of Operations Management 12
- 15.871 Introduction to System Dynamics 6
- 15.872 System Dynamics II 6
- 15.873 System Dynamics for Business and Policy 9

Electives

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

**Required Electives**

Select 21 units of electives, including at least 6 units in each of the following categories: 21

- SCM Electives
- Analysis Electives
- Management Electives

Total Units 90

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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>IDS.145[J]</td>
<td>Data Mining: Finding the Models and Predictions that Create Value</td>
<td>6</td>
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<tr>
<td>IDS.147[J]</td>
<td>Statistical Machine Learning and Data Science</td>
<td>12</td>
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<td>IDS.305[J]</td>
<td>Business and Operations Analytics</td>
<td>6</td>
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<tr>
<td>IDS.330</td>
<td>Real Options for Product and Systems Design</td>
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<tr>
<td>IDS.333</td>
<td>Risk and Decision Analysis</td>
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<tr>
<td>IDS.338[J]</td>
<td>Multidisciplinary Design Optimization</td>
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**Management Electives**

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<th>Course Title</th>
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<tr>
<td>15.025</td>
<td>Game Theory for Strategic Advantage</td>
<td>9</td>
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<tr>
<td>15.386</td>
<td>Leading in Ambiguity: Steering Through Strategic Inflection Points</td>
<td>6</td>
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<tr>
<td>15.390</td>
<td>New Enterprises</td>
<td>12</td>
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<td>15.762[J]</td>
<td>Supply Chain Planning</td>
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<td>15.763[J]</td>
<td>Manufacturing System and Supply Chain Design</td>
<td>6</td>
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<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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<td>15.784</td>
<td>Operations Laboratory</td>
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<tr>
<td>15.900</td>
<td>Competitive Strategy</td>
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<td>15.904</td>
<td>Strategy and the CEO</td>
<td>6</td>
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