MASTER OF SCIENCE IN TRANSPORTATION (MST)

Master of Science in Transportation Program Description
(http://catalog.mit.edu/interdisciplinary/graduate-programs/transportation)

A Master of Science degree at MIT requires a minimum of 66 units of graduate subjects, plus a thesis. The subject and thesis requirements for this program are described below.

Subject Requirements

| Core Subjects | 1.200[J] Transportation Systems Analysis: Performance and Optimization | 12 |
| Core Subjects | 1.201[J] Transportation Systems Analysis: Demand and Economics | 12 |

Individually Designed Program
Select three subjects from the MST Program Areas, listed separately below. Select one subject from the Policy and Technology Subjects, listed separately below.

Computer Programming Requirement
1.001 Engineering Computation and Data Science | 12 |

Total Units | 66 |

1. Requests to waive this requirement based on prior coursework must be submitted in writing to the Transportation Education Committee (TEC) executive director.

2. Recommended for most students. See the MST website (http://cee.mit.edu/graduate/transportation/degreerequirements) for information about acceptable substitutions.

Thesis Requirement

Students must complete a research-based thesis on a topic of their choice that has been approved by the thesis supervisor.

1.THG Graduate Thesis | 24 |

MST Program Areas

Select from the subjects below to fulfill the Individually Designed Program Requirement.

Air Transportation
16.71[J] The Airline Industry | 12 |
16.72 Air Traffic Control | 12 |
16.75[J] Airline Management | 12 |
16.781[J] Planning and Design of Airport Systems | 12 |
16.886 Air Transportation Systems Architecting | 12 |

Analysis and Planning Methods
1.202 Demand Modeling | 12 |
1.205 Advanced Demand Modeling | 12 |

Data Sciences for Transportation
1.204 Computer Modeling: From Human Mobility to Transportation Networks | 12 |
6.268 Network Science and Models | 12 |
11.205 Introduction to Spatial Analysis | 6 |
15.060 Data, Models, and Decisions | 9 |
15.077[J] Statistical Learning and Data Mining | 12 |

Intelligent Transportation Systems, Safety, and Security
1.208 Resilient Infrastructure Networks | 12 |
16.412[J] Cognitive Robotics | 12 |
16.413 Principles of Autonomy and Decision Making | 12 |
16.422 Human Supervisory Control of Automated Systems | 12 |
STS.487 Foundations of Information Policy | 12 |

Logistics and Supply Chain Management
1.260[J] Logistics Systems | 12 |
1.261[J] Case Studies in Logistics and Supply Chain Management | 9 |
1.265[J] Global Supply Chain Management | 6 |
SCM.266 Freight Transportation | 6 |

Transportation Planning, Policy, and Sustainability
1.253[J] Transportation Policy, the Environment, and Livable Communities | 12 |
2.65[J] Sustainable Energy | 12 |
11.478 Behavior and Policy: Connections in Transportation | 12 |
11.527 Advanced Seminar in Transportation Finance | 12 |
IDS.435 Law, Technology, and Public Policy | 12 |

Urban Transportation
1.208 Resilient Infrastructure Networks | 12 |
### Policy and Technology Subjects
Select from the subjects below to satisfy the Policy / Technology Requirement.

#### Transportation Policy Subjects
- **1.252[J]** Urban Transportation Planning 12
- **1.253[J]** Transportation Policy, the Environment, and Livable Communities 12
- **11.478** Behavior and Policy: Connections in Transportation 12

#### Transportation Subjects with Substantial Policy Content
- **11.526[J]** Comparative Land Use and Transportation Planning 12
- **16.71[J]** The Airline Industry 12

#### Policy Subjects with Modest or No Transportation Content
- **11.255** Negotiation and Dispute Resolution in the Public Sector 12
- **11.481[J]** Analyzing and Accounting for Regional Economic Change 12
- **11.482[J]** Regional Socioeconomic Impact Analyses and Modeling 12
- **15.023[J]** Global Climate Change: Economics, Science, and Policy 9
- **IDS.412[J]** Science, Technology, and Public Policy 12
- **IDS.435** Law, Technology, and Public Policy 12
- **STS.487** Foundations of Information Policy 12

### Technology Subjects
- **2.65[J]** Sustainable Energy 12
- **6.268** Network Science and Models 12
- **16.422** Human Supervisory Control of Automated Systems 12
- **16.72** Air Traffic Control 12
- **MAS.552[J]** City Science 12

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1. Also satisfies the Technology requirement.
2. Special subjects offered by the Department of Urban Studies and Planning (Course 11) may satisfy this requirement if content satisfies MST criteria. Contact program office for available offerings.
3. Also satisfies the Policy requirement.