

MASTER OF SCIENCE IN TRANSPORTATION

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

Core Subjects

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| 1.200[J] | Transportation: Foundations and Methods | 12 |
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| 11.251 | Frontier of Transportation Research | 3 |
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Select one of the following: 12

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| 1.202 | Demand Modeling | |
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| 1.208 | Resilient Networks | |
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| 1.260[J] | Logistics Systems | |
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| 11.478 | Behavioral Science, AI, and Urban Mobility | |
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Computation/Analytics

Select one of the following: 12

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| 6.3732[J] | Statistics, Computation and Applications | |
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| 6.7900 | Machine Learning | |
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| 6.7910[J] | Statistical Learning Theory and Applications | |
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| 6.C51 | Modeling with Machine Learning: from Algorithms to Applications ¹ | |
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| 15.071 | The Analytics Edge | |
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| 15.072 | Advanced Analytics Edge | |
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Policy, Technology, and Society^{2,3}

Select one subject from the list below. 6-12

Transportation Subject Electives

Select a minimum of 24 units of transportation related electives in consultation with advisor. 24

Thesis

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

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| 1.THG | Graduate Thesis | 24 |
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Total Units 93-99

¹ Credit cannot be earned unless 6.C51 and 1.C51 are completed at the same time.

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

Policy, Technology, and Society Subjects

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| 2.65[J] | Sustainable Energy | 12 |
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| 2.810 | Manufacturing Processes and Systems | 12 |
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| 6.7260 | Network Science and Models | 12 |
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| 10.805[J] | Technology, Law, and the Working Environment | 9 |
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| 11.255 | Negotiation and Dispute Resolution in the Public Sector | 12 |
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| 11.478 | Behavioral Science, AI, and Urban Mobility | 12 |
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| 11.526[J] | Comparative Land Use and Transportation Planning | 12 |
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| 11.540 | Urban Transportation Planning and Policy | 12 |
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| 15.020 | Economics of Energy, Innovation, and Sustainability | 12 |
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| 15.038[J] | Energy Economics and Policy | 12 |
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| 15.230 | Public Policy and the Private Sector | 9 |
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| 15.655[J] | Law, Technology, and Public Policy | 12 |
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| 16.422 | Human Supervisory Control of Automated Systems | 12 |
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| 16.453[J] | Human Systems Engineering | 12 |
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| 16.71[J] | The Airline Industry | 12 |
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| 16.72 | Air Traffic Control | 12 |
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| 16.89[J] | Space Systems Engineering | 12 |
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| MAS.552[J] | City Science | 12 |
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| MAS.750 | Human-Robot Interaction | 9 |
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| MAS.836 | Sensor Technologies for Interactive Environments | 12 |
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| MAS.859[J] | Space Technology for the Development Leader | 6 |
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| IDS.333[J] | System Design and Management for a Changing World: Tools | 6 |
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| IDS.410 | Modeling and Assessment for Policy | 9 |
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| IDS.411 | Concepts and Research in Technology and Policy | 9 |
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| IDS.412[J] | Science, Technology, and Public Policy | 12 |
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| IDS.521[J] | Energy Systems for Climate Change Mitigation | 12 |
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| IDS.522 | Mapping and Evaluating New Energy Technologies | 12 |
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| IDS.526[J] | Sustainability Science and Engineering | 9 |
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MASTER OF SCIENCE IN TRANSPORTATION

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| STS.477[J] | Writing: Science, Technology, and Society | 12 |
| STS.487 | Foundations of Information Policy | 12 |