

Master in Urban Planning Transportation and Infrastructure Concentration 2024-2025

Advisors: Ann Forsyth and Carole Voulgaris

Email: aforsyth@gsd.harvard.edu and cvoulgaris@gsd.harvard.edu

Other Concentration Faculty: Diane Davis and Magda Maaoui

This area of concentration covers any form of infrastructure that is an important shaper of the built environment, particularly transportation, storm water, drinking water and sewage but also energy and telecommunications. Students are encouraged to take courses that examine infrastructure from a variety of perspectives, including:

1. Planning practice and policy
2. Analytic methods applied to infrastructure planning and operations
3. The physical design of infrastructure
4. The relationship between infrastructure and land use
5. Private infrastructure provision, regulation and finance
6. Specialized courses on modes of transportation or types of infrastructure

Please be aware that course offerings are subject to change. New courses may be introduced, while some of the approved courses listed here may not be available every year. This memo is subject to revisions based on course availability. Courses that are not mentioned in this memo do not automatically have approval and may only be approved after a review and written permission from the Concentration Advisor(s).

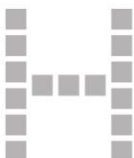
Recommended introductory courses:

The following courses are recommended to those interested in the concentration. They are introductory level courses that give a good overview of the topics and subject matter covered in more depth by other courses in the concentration:

SCHOOL	COURSE NUMBER	COURSE TITLE	UNITS	FACULTY
GSD	5394	Travel Behavior Forecasting (Spring)	4	Voulgaris
GSD	5511	Public Transit (Fall)	4	Voulgaris

FALL 2024 APPROVED COURSES:

SCHOOL	COURSE NUMBER	COURSE TITLE	UNITS	FACULTY
GSD	3241	Theories of Landscape as Urbanism	4	Waldheim, Doherty
GSD	4362	Structuring Urban Experience: From the Athenian Acropolis to the Boston Common	4	Smith
GSD	5511	Public Transit	4	Voulgaris
GSD	6381	Power Energy: Mapping the Thickened Ground of Labor	4	Monacella
FAS	E-PSCI 239	The Climate Energy Challenge: A Foundation in Science, Technology and Policy	4	Schrag
FAS	ESPP 171	Solid Waste in Developing Countries	4	Thomas
HKS	API 141	Finance ¹	4	Deep
HKS	IGA 402	The Climate Energy Challenge: A Foundation in Science, Technology and Policy (Open to HKS/MUP dual degrees) ²	4	Schrag
HKS	MLD 411	Introduction to Budgeting and Financial Management (Fall 2)	2	Blimes,



				Iammartino
HKS	MLD 601	Operations Management	4	Fagan
MIT	1.205	Advanced Demand Modeling ³ (<i>not offered 2025-2026</i>)	4	Ben-Akiva
MIT	1.232 15.054 16.71	The Airline Industry	4	Allroggen
MIT	1.253 11.543	Transportation Policy, the Environment, and Livable Communities ³	4	TBD
MIT	1.263 11.263 SCM.293	Urban Last-Mile Logistics (Fall 2) ⁴	2	Winkenbach
MIT	1.303 11.273	Infrastructure Design for Climate Change ⁵	2	Einstein
MIT	11.478	Behavioral Science, AI, and Urban Mobility ⁵	4	TBD
MIT	11.529 15.379	Mobility Ventures: Driving Innovation in Transportation Systems	4	Berlin, Zhao, Moavenzadeh
MIT	11.540	Urban Transportation Planning	4	Aloisi
MIT	11.S953	Public Transportation Analytics and Planning (Fall 2) ⁵	Contact registrar	Stewart

1. Priority enrollment is given to HKS students and may not be available to GSD students.

2. Only open to HKS-MUP joint degree students. Cross-registration is not available. MUPs who are not also HKS dual degree students should cross-register in the FAS version of the course.

3. Prerequisite: [1.202](#) or permission of instructor

4. Prerequisite: [SCM.254](#) or permission of instructor.

5. Enrollment requires permission of instructor.

SPRING 2025 APPROVED COURSES:

SCHOOL	COURSE NUMBER	COURSE TITLE	UNITS	FACULTY
GSD	4374	Cities, Infrastructures, and Politics: From Renaissance to Smart Technologies	4	Picon
GSD	5394	Travel Behavior Forecasting	4	Voulgaris
FAS	ECON 1661	Economics of Climate Change and Environmental Policy (<i>jointly offered by HKS</i>)	4	Stavins
HKS	API 135	Economics of Climate Change and Environmental Policy (<i>jointly offered by FAS</i>)	4	Stavins
HKS	DEV 209	Management, Finance, and the Regulation of Public Infrastructure in Developing Countries	4	Lee
HKS	MLD 605	Systems Thinking and Supply Chain Management: Climate, Poverty and Human Rights	4	Fagan
HKS	MLD 620M	The Data Smart City: Driving Innovation with Technology (Spring 2) ¹	2	Goldsmith
MIT	1.C01	Machine Learning for Sustainable Systems ²	2	Amin
MIT	1.200 11.544 IDS.675	Transportation: Foundations and Methods ³	4	Wu
MIT	1.202	Demand Modeling	4	Ben-Akiva
MIT	1.286 11.477	Urban Energy Systems and Policy ⁴	4	Hsu
MIT	11.324	Modeling Pedestrian Activity in Cities	4	TBD
MIT	11.381	Infrastructure Systems in Theory and Practice	4	Hsu
MIT	11.449	Decarbonizing Urban Mobility	4	Salzberg
MIT	11.543	Transportation Policy, the Environment, and Livable Communities	4	TBA
MIT	11.547 SCM.287	Global Aging & the Built Environment	4	TBA

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2. Prerequisite: ([1.000](#) and [1.010](#)) or permission of instructor; Co-requisite: [6.C01](#)
3. Prerequisite: [1.000](#), ([1.00](#) and [1.010](#)), or permission of instructor.
4. Enrollment requires permission of instructor.

APPROVED BUT NOT OFFRED IN 2024-2025:

*For the below courses to be approved for the current academic year, they **must be offered with the same course number, title, and instructor.** The course must be reapproved if doesn't match the below version of the course.*

SCHOOL	COURSE NUMBER	COURSE TITLE	UNITS	FACULTY
GSD	5380	Experimental Infrastructures <i>(last offered 2022-2023)</i>	4	Spinak
GSD	5437	Transportation Economics and Finance <i>(last offered 2023-2024)</i>	4	Voulgaris
GSD	5463	Planning for Pedestrians and Cyclists <i>(last offered 2023-2024)</i>	4	Voulgaris
GSD	6277	Survey of Energy Technology <i>(last offered 2022-2023)</i>	4	Aziz
FAS	AFRAMER 130Y	Mobility, Power and Politics <i>(last offered 2023-2024)</i>	4	Agbiboa
HKS	API 148	Advanced Risk Management and Infrastructure Finance <i>(last offered 2022-2023)</i>	4	Deep
HKS	IGA 411	The Energy-Climate Challenge <i>(last offered 2020-2021)</i>	4	Lee, Holdren
HKS	IGA 565	Analytical Methods for Complex Adaptive Systems <i>(last offered 2022-2023)</i>	4	Siddiqi
HKS	MLD 410	State and Local Financial Policy <i>(last offered 2019-2020)</i>	4	Chodos
HLS	2040	Autonomous Vehicles and the Law <i>(last offered 2020-2021)</i>	4	Weinstock
HLS	2227	Autonomous Vehicles and Local Government Lab <i>(last offered 2019-2020)</i>	2	Crawford
HLS	2813	City Use of Technology <i>(last offered 2022-2023)</i>	4	Crawford
HSPH	ID 539	Built Environment, Human Transportation, Public Health, and Climate Change <i>(last offered 2022-2023)</i>	4	Lusk
MIT	1.251 11.526	Comparative Land Use and Transportation Planning <i>(last offered 2023-2024)</i>	4	Duarte
MIT	1.818 2.65 10.391 11.371	Sustainable Energy <i>(not offered 2024-2025)</i>	4	Golay

