

Module Code	CE7T01
Module Name	T1: TRANSPORTATION POLICY
ECTS Weighting¹	5 ECTS
Semester taught	Semester 1
Module Coordinator/s	Prof. Bidisha Ghosh (bghosh@tcd.ie) Lecturer(s): Prof. Margaret O'Mahony (Margaret.omahony@tcd.ie) Prof. Brian Caulfield (brian.caulfield@tcd.ie)
<u>Module Learning Outcomes</u> with reference to the <u>Graduate Attributes</u> and how they are developed in discipline	<p>On successful completion of this module, students should be able to:</p> <p>LO1. Develop an overview of transportation and traffic engineering. LO2. Develop an understanding of queuing models and traffic paradoxes. LO3. Discuss and design the layout of a traffic junction. LO4. Design and evaluate fixed-time traffic signal plan of a junction. LO5. Implement land-use models to manage traffic demand. LO6. Develop knowledge and understanding of urban transportation Management policies. LO7. Evaluate the impact of public transport policies.</p> <p>Graduate Attributes: levels of attainment To act responsibly - Enhanced To think independently - Enhanced To develop continuously - Introduced To communicate effectively - Enhanced</p>
Module Content	The students will be given an introduction to role of policy in transportation, urban transportation policies, land-use modelling and public transport quality and benchmarking, fundamentals of traffic engineering focusing on junction and traffic signal design, queuing theory, traffic paradoxes, junction design and traffic signal designing.

¹ [TEP Glossary](#)

Teaching and Learning Methods

- Core content via lecture(direct).
- Research paper and case study-based group discussion.
- Individual Assignments.

Assessment Details² Please include the following: <ul style="list-style-type: none"> • Assessment Component • Assessment description • Learning Outcome(s) addressed • % of total • Assessment due date 	Assessment Component	Assessment Description	LO Addressed	% of total	Week due			
	Continuous Assessment	Report and group discussion	LO1, LO3, LO4	10%	12, Sem 1			
	Examination	Written, closed-book examination	LO1-7	90%	Sem 1 exam			
Reassessment Requirements	Reassessment – Examination (3 hours) –100%.							
Contact Hours and Indicative Student Workload²	<table border="1"> <tr> <td> Contact hours: 27 lectures Directed learning: 15 hours </td> </tr> <tr> <td> Independent Study (preparation for course and review of materials): 55hrs </td> </tr> <tr> <td> Independent Study (preparation for assessment, incl. completion of assessment): 26 hours assignments </td> </tr> </table>					Contact hours: 27 lectures Directed learning: 15 hours	Independent Study (preparation for course and review of materials): 55hrs	Independent Study (preparation for assessment, incl. completion of assessment): 26 hours assignments
Contact hours: 27 lectures Directed learning: 15 hours								
Independent Study (preparation for course and review of materials): 55hrs								
Independent Study (preparation for assessment, incl. completion of assessment): 26 hours assignments								
Recommended Reading List	O'Flaherty, Coleman A., ed. <i>Transport planning and traffic engineering</i> . CRC Press, 2018. Traffic Engineering (What's New in Engineering) by Roger Roess , Elena Prassas & William McShane							
Module Pre-requisite	4A16 Transport Engineering & Modelling							
Module Co-requisite								
Module Website								

² [TEP Guidelines on Workload and Assessment](#)

**Are other
Schools/Departments involved
in the delivery of this module?
If yes, please provide details.**

No

Module Approval Date

Approved by

Academic Start Year

1st September 2024

Academic Year of Date

2024/2025