School of Civil and Environmental Engineering

Term 2, 2021

CVEN4402 Transport Systems
Part I: Network Analysis

6
5 hours per week
Wednesday 11:00 - 14:00

	• Review lecture material and textbook • Do set problems and assignments • Reflect on class problems and assignments • Download materials from Moodle to supplement notes taken in lecture • Keep up with notices and find out marks via Moodle
	• Find out what you must learn • See methods that are not in the textbook • Follow worked examples • Hear announcements on course changes
	• Be guided by Demonstrators • Practice solving set problems • Ask questions
	• Demonstrate your knowledge and skills • Demonstrate higher understanding and problem solving

A successful study of this course will enable students to:

1.	Describe the fundamentals of transport network analysis	PE1.1, PE1.3, PE2.2
2.	Apply route choice analysis techniques	PE1.1, PE1.2, PE1.3, PE1.5, PE2.1, PE2.2, PE2.3
3.	Apply network user equilibrium solution methods	PE1.5, PE2.1, PE2.2, PE2.3
4.	Justify the importance of transport system concept for analysis and design	PE1.1, PE1.2, PE1.3, PE1.5, PE2.1, PE2.2
5.	Apply transport network planning techniques	PE1.1, PE1.2, PE1.3, PE1.5, PE2.1, PE2.2, PE2.3

*Please refer to Appendix A for details of competencies.

For each hour of contact it is expected that you will put in at least 1.5 hours of private study.

1	Wednesday, 2 June	Course Introduction Introduction to Transport Systems, Planning and Networks
2	Tuesday, 9 June	Routing Algorithms
3	Tuesday, 16 June	Convexity and Optimization
4	Tuesday, 23 June	Introduction to User Equilibrium User Equilibrium Assignment Solution Methods
5	Tuesday, 30 June	Path Based UE Solution Methods
6	No Lecture	
7	Tuesday, 14 July	User Equi