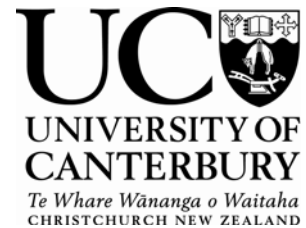


Master of Transportation Engineering

Department of Civil Engineering
University of Canterbury



2007 Postgraduate Courses

Note: These are still subject to confirmation; check with the Dept for more details

COURSE	DESCRIPTION
Semester 1	
ENTR601 - Traffic Management	Transport economics. Travel demand and supply management. Congestion pricing. Transport policy formulation. Policy instruments and effects. Traffic management modelling.
ENTR602 - Accident Reduction & Prevention	Impact on society. Data analysis and interpretation. Hazardous location identification. Road environment factors. Problem diagnosis. Treatment options. Treatment selection. Economic appraisal. Evaluation and monitoring. Safety auditing.
ENTR604 - Pavement Management Systems	Pavement management concepts, levels and functions. Data requirements. Evaluation of functional and structural performance. Intervention criteria. Deterioration models. Rehabilitation and maintenance strategies and priorities.
ENTR607 - Highway Geometric Design	User, vehicle, road environment. Sight distance. Speed environment, design speed. Design consistency. Horizontal and vertical curve design. Cross-section design. Intersection/interchange principles. Design plans, documentation, checking. Signs, marking, lighting and delineation. Land use access and controls. Overtaking opportunities.
Semester 2	
ENTR603 - Advanced Pavement Design	Stresses, strains and deflections in flexible and rigid pavements. Pavement materials characterization. Mechanistic and mechanistic-empirical design methods. Pavement performance and evaluation.
ENTR605 - Transport Planning and Modelling	Planning legislation. Land use planning models. Travel demand modelling and prediction. Economic appraisal. Environmental impact assessment. Public transport planning and operation.
ENTR606 - Advanced Traffic Engineering	Traffic flow modelling. Queuing theory and its application. Network reliability analysis. Intersection design & modelling. Advanced traffic information & control systems. Designing for cyclists and pedestrians.

Note: Other relevant courses at Canterbury or elsewhere may also be suitable for credit in the Programme.

For more details contact:

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Or visit the website

www.met.canterbury.ac.nz

Diploma/Master of Transportation Engineering



The University of Auckland
NEW ZEALAND

Department of Civil & Environmental Engineering
University of Auckland



2007 Postgraduate Courses

Note: These are still subject to confirmation; check with the Dept for more details

COURSE	DESCRIPTION
Semester 1	
CIVIL661 - Highway & Pavement Engineering	A range of selected topics in highway engineering and pavement materials which will provide a basis for extension into further studies. <i>(Diploma paper)</i>
CIVIL764 - Highway Safety & Operations	Holistic highway geometric design, energy absorption systems. Safety management & audit. Temporary traffic management techniques. Highway capacity, level of service. Speed prediction & vehicle operating cost modelling. Passing/climbing lane evaluation. Economic evaluation models and appraisal techniques.
CIVIL766 - Road Management Systems	Planning, administration and management of road construction and maintenance. Maintenance management systems. Principles, methods and techniques of pavement deterioration modelling. Multi-year programming of works using RAMM, HDM models and dTIMS.
CIVIL770 - Transport Systems Economics	A course of selected topics on the operations of transport facilities and systems, with emphasis on the economics of the operations.
Semester 2	
CIVIL660 - Traffic Engineering & Planning	A range of selected topics in traffic engineering and transportation planning which will provide a basis for extension into further studies. <i>(Diploma paper)</i>
CIVIL762 - Transportation Planning	Land use, transport and travel. Land transport strategies. Trip generation and parking demand. Public transport usage. Data surveys. Forecasting techniques. Analytical models for trip generation, attraction, distribution, assignment, modal split. Operational, economic and social evaluations and assessment of environmental effects.
CIVIL769 – Studies in Transportation 1 – Geometric Design	User, vehicle, road environment. Sight distance. Speed environment, design speed. Design consistency. Horizontal and vertical curve design. Cross-section design. Intersection/interchange principles. Design plans, documentation, checking. Signs, marking, lighting and delineation. Land use access and controls. Overtaking opportunities.
CIVIL771 - Planning & Managing Transport	Integrated planning of transport and land use. Requirements of the NZTS, the LTMA and the RMA. Urban design and the NZ protocol. Provisions for public transport, cycling and walking. Integration with sea and air transport. Travel demand management techniques and applications. Congestion pricing and tolling. Public-private partnerships. Outline of ITS applications.

Note: Other relevant courses at Auckland or elsewhere may also be suitable for credit in the Programme.

For more details contact:

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Or visit the website

www.cee.auckland.ac.nz/transportation/transportation_graduate.aspx