

**DEPARTMENT OF LOGISTICS
UNIVERSITY OF STELLENBOSCH**

**POSTGRADUATE INFORMATION:
TRANSPORT ECONOMICS
2025**

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Subject-head

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TRANSPORT ECONOMICS POSTGRADUATE MODULES

Anchor programmes:

BComHons (Transport Economics)

Programme module

Code	Module	Credits	Module Name
21008	778	120	BComHons (Transport Economics)

MCom (Transport Economics)

Programme module

Code	Module	Credits	Module Name
21008	879	180	MCom (Transport Economics) Full Thesis – Hybrid mode
21008	899	180	MCom (Transport Economics) Coursework and Thesis

Compulsory module for the Coursework and Thesis option

Code	Module	Credits	Module Name
11245	874	150	Thesis: Transport Economics

Elective modules for the Coursework and Thesis option

Code	Module	Credits	Module Name
64017	814	15	Capita Selecta 1 (Transport Economics)
64017	844	15	Capita Selecta 2 (Transport Economics)

MODULES FOR 2025				
Module number	Module	Code	Lecturer	Credits
First semester				
11	Introduction to Forecasting [LM] [Compulsory]	10911 723	Mr H Freiboth / Prof JH Louw	15
17	Road Transport Management [TE]	59145 744	Dr J van Rensburg / Dr G Khumalo	15
34	Maritime Economics [TE]	14024 773	Prof SC Krygsman / Mr R Kgwedi	15
4	Transport Investment and Economic Development [TE] [Compulsory]	13473 711	Prof SC Krygsman	15
	Research assignment [TE] [Compulsory]	11047 775	Mr R Kgwedi + supervisors	30
Second semester				
13	Competition and Regulation [TE] This module is a pass prerequisite for MCom	59102 715	Prof SC Krygsman	15
21	Urban and Regional Transport Economics [TE] [Compulsory]	59153 742	Mr M October / Mr R Kwedi	15
25	Forecasting [OR] Module 11 is a pass prerequisite	10933 753	Prof JH Nel	15
41	International Trade, Transport Infrastructure and Logistics [TE]	13076 744	Dr J van Rensburg	15

Elective modules from the Logistics' programme may be selected upon approval by the Transport Economics subject head

Capita Selecta: Rail and Air Economics module offerings to be confirmed

MODULE 4

13473 711 TRANSPORT INVESTMENT AND ECONOMIC DEVELOPMENT

Course objective

With their investment in transport infrastructure, governments are invariably confronted with a complex and multi-faceted economic problem. Firstly, there is the scarcity aspect: a multitude of (and often very extensive) transport needs have to be met with limited means. Secondly, there is a problem of choice: a choice must be made between different forms and modes of transport in order to maximise social utility. Thirdly, maximum satisfaction of needs depends on effective transport activities and infrastructure. In this module the supporting economic theory and evaluation methods are discussed and applied to equip prospective transport economists with the ability to contribute towards alleviating the above- mentioned problem. Understand the relationship between transport and economic development and understand how, when, why and to what extent transport infrastructure influences the economy.

The outcomes of this module are to:

- Understand the relationship between transport welfare and GDP appraisal metrics
- Understand the concept of economic investment decision making and the use of economic evaluation analysis;
- Use principles of economic investment decision making to select projects which generate maximum welfare; and
- Apply appropriate analytical methods to ensure that transport authorities are able to make the most economically justified decisions taking into account equity and equality

The course will equip students with the necessary theoretical understanding of the impact of transport investment on business and the economy. Students should note that the module combines theory with empirical data with a quantitative foundation

Remarks

1. The module is presented during the first semester.
 2. The module counts 15 credits.
 3. The module is compulsory for the honours program in Transport Economics.
 4. Transport Economics 318 and 348 are pass prerequisites for this module.
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MODULE 17

59145 744 ROAD TRANSPORT MANAGEMENT

Course objective

The module is concerned with providing the student with a practical overview of the functions of freight and passenger transport management and recommend practices that can ensure efficiency, quality and effective delivery of service to customers. The purpose of this module is to enable students to comprehend the integrated nature of transport management so that they can contribute to the implementation of sound transport management principles in a transport environment. The road transport industry is highly competitive. Therefore it is imperative to have a thorough understanding of the appropriate management aspects in transport operations. In this module a selection of topics relevant to strategic, tactical and operations management are covered which are essential for successfully running a road transport firm. These core components of learning include knowledge of transport logistics, routing and scheduling, basic principles of road transport management and occupational health, safety and environmental protection that is applied in operating successfully in a road transport logistics environment.

Course content

1. The South African road network
2. Planning the transport function
3. Organising the transport function
4. Staffing the transport function
5. Transport operations
6. Monitoring transport operations
7. Transport operations costing and reporting
8. Finance and external relations
9. Compliance with legislation

Remarks

1. This module is offered during the first semester.
 2. This module counts 15 credits.
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MODULE 21

59153 742 URBAN AND REGIONAL TRANSPORT ECONOMICS

Course objective

The South African economy is largely dependent on the production of goods and services, and commercial activities in the metropolitan areas. These activities cannot be efficiently carried out without an effective urban transport system. In this module the economic aspects of urban transport are explained and analysed. The knowledge thus obtained is important for urban planners, administrators, transport economists and a career in applied economics.

Course content

1. The relationship between urban land use and transport provision
2. The urban transport problem and proposed solutions
3. The urban transport planning process
4. Urban transport systems and technology
5. The urban transport investment decision
6. Pricing and subsidies
7. Urban transport policy and legislation in South Africa

Remarks

1. The module is presented during the second semester.
 2. The module counts 15 credits.
 3. This module is compulsory for students following the honours program in Transport Economics.
 4. Transport Economics 318, 348 is pass prerequisite for this module.
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MODULE 34

14024 773 MARITIME ECONOMICS

Course Objectives

Almost 90 per cent of the volume of international trade is seaborne. The globalisation of economic activities has led to fierce competition, resulting in lower freight rates to which the shipping business has had to adapt. This module focuses on the demand for shipping, with specific reference to South African imports and exports, as well as on the supply of shipping and the changes in the behaviour of shipping markets.

Course content

1. The main features of the ship
2. Ship design, the economies of shipbuilding and scrapping
3. Types of ships around the globe (cargoes, trades and future trends)
4. Maritime canals, inland waterways & sea ports
5. Liner conferences & charter parties
6. Containerisation
7. Ship financing, management & governance
8. The blue economy

Remarks

1. This module is presented during the first semester.
2. The module counts 15 credits.
3. Transport Economics 318 and 348 are pass prerequisites for this module

MODULE 41

13076 744 INTERNATIONAL TRADE, TRANSPORT INFRASTRUCTURE AND LOGISTICS

Course objective

The growth of the South African economy is dependent on the current and future trade of resources with neighbouring and international countries. This entails the import and export of various commodities including human capital based on sound theoretical principles in political environments that is cost effective. This module focusses on various topics relevant to the export and import trade market, the optimal transport infrastructure to be used for these trade activities including the correct logistical processes to be undertaken.

Course content

1. Introduction and Trade in the Global Economy
2. Evolution of Trade Theories
3. Import Tariffs, quotas and export subsidies
4. International Infrastructure
5. Ocean Transportation
6. International Air Transportation
7. International Land and multimodal Transportation
8. International Terms of sale and payment
9. International trade documentation
10. Custom Clearance

Remarks

1. This module is offered during the second semester.
2. This module counts 15 credits.

MODULE 13

59102 715 COMPETITION AND REGULATION

Course objective

Although the South African economy is largely based on free market principles, and most government transport enterprises have either been corporatised or privatised, there is still a need to economically regulate certain aspects which relate to the supply of transport services. The module strives towards making students confident in working with the economic principles of transport regulation, transport pricing, transport competition and government transport policy. Thorough knowledge of these aspects, and the insight to execute transport policy and regulations judiciously, should contribute towards the transport industry supporting the national economy most effectively.

Course content

1. Economic principles of regulation and coordination
2. Market characteristics and phenomena: market forms and market contestability, modal cost structures, horizontal and vertical integration and opportunities for the attainment of economies of scale, long-haul, scope and density
3. Market failures, limitations and problems: public goods externalities, the so-called natural monopoly, incomplete/insufficient user perception, indivisibilities and predatory pricing
4. Regulatory failures, limitations and problems; deregulation, corporatisation and privatisation; and self-regulation
5. Control of market entry
6. Principles of price regulation and concomitant problems with respect to: operating expenses, service quality, capital investment, return on capital, depreciation and measures of effectiveness
7. Price-fixing under conditions of regulation: marginal cost pricing (short and long run), price discrimination, the treatment of common and joint costs and the influence of varying demand on price-fixing
8. The place and role of the common carrier in developing and industrial economies, and the vulnerability of the common carrier to ruinous competition and cream skimming
9. The determinants, goals and objectives of government transport policy

Remarks

1. The module is presented during the second semester.
 2. The module counts 15 credits.
 3. This module is compulsory for students following the honours program in Transport Economics.
 4. Transport Economics 318 and 348 or Economics 318, 348 are pass prerequisites for this module.
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