Transport Economics

It is difficult to consider any product or person that does not require transport at some stage. The uneven distribution of activities – think of work, home and recreation – demands that nearly all persons and goods must be transported. The transport sector, however, has to confront various issues such as congestion on the roads and in cities, environmental pollution and a shortage of infrastructure, and is characterised by fierce competition and cutthroat monopolies.

Transport Economics relates to the optimal allocation of scarce resources within the transport sector and between the transport sector and other sectors in the economy. In this subject the principles of domestic and international transport are studied in order to gain the biggest advantage from transport provision while minimising resource consumption.

# Career opportunities

As far as employment opportunities are concerned, transport economists often serve as consultants to government institutions, private transport companies and the private sector. As a transport economist, you will employ the skills required for predicting the demand (for example, the number of trips and choice of transport mode) and supply (capacity of transport modes), and for studying the methods of financing maintenance, and improvement and expansion of the transport network (such as tolls and road user charges) in order to provide solutions to transport problems.

# Undergraduate subjects offered

Transport Economics is presented at second- and third-year level and can be followed as a major subject in most BComm programmes.

### 2nd year:

**Transport Economics 214 (16 Credits)**

Introduction to transport economics: Role and functions of transport. Nature of the transport demand. Economic, physical and service characteristics of air, road rail, sea and pipeline transport, as well as pipelines. Cost principles and dilemmas of different forms of transport. Economic efficiency in the transport market. Evolution of freight transport regulation in South Africa.

**Transport Economics 244 (16 Credits)**

Introduction to urban transport economics: Economic characteristics of the provision of urban transport. Impact of transport cost on land use, land price, product prices and industrial location. Urban transport problems and solutions. Urban transport planning. Urban transport systems. Cost structure of urban transport modes. Tariff determination in the public transport sector, including the subsidisation of passenger transport. Competition and regulation in the passenger transport industry. Urban transport policy and legislation in South Africa.

### 3rd year:

**Transport Economics 318 (24 Credits)**

Transport systems analysis and modelling, including transport demand analysis and forecasting of goods and passenger transport requirements. Planning, evaluation and provision of transport infrastructure. Calculation, allocation and recovery of infrastructure cost. Determination of road user and non-road user benefits and costs.

**Transport Economics 348 (24 Credits)**

Government interest in and the regulation of transport operations. Government involvement in transport planning and policy analysis. Modal cost and market structures for shipping, air and pipeline transport. Transport tariff setting for shipping, air and pipeline transport.

*Please consult the official Economic and Management Sciences Yearbook for more information regarding subject combinations and requirements.*