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# University of Pretoria Yearbook 2020

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## MPhil Agricultural Economics (Coursework) (07255251)

**Minimum duration of study** 2 years

**Total credits** 180

**NQF level** 09

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### Admission requirements

- Relevant Honours degree with an average of at least 65%.

### Other programme-specific information

The degree programme must be completed within four years after the first registration.

Please note that not all modules are presented every year.



## Curriculum: Year 1

### Core modules

#### Institutional economics 882 (LEK 882)

<b>Module credits</b>	15.00
<b>Service modules</b>	Faculty of Economic and Management Sciences
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	1 lecture per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Agricultural Economics Extension and Rural Develo
<b>Period of presentation</b>	Semester 1

#### Module content

Institutional and behavioural economics. This module will expose students to the principles of the New Institutional Economics paradigm and how it can be utilized to improve the analysis of agricultural economic and agricultural development problems and issues. Major themes covered are: The agricultural development challenge: stylised features; new institutional economics: distinctive features and concepts; institutions and development: A historical and macro-perspective techno-economic characteristics and agricultural systems and products in poor countries; NIE analysis of markets and markets structures; the State: Political and institutional determinants of agricultural policy; collective action; transactions costs in smallholder agriculture; case studies.

### Elective modules

#### Quantitative methods for agricultural and environmental policy 814 (LEK 814)

<b>Module credits</b>	15.00
<b>Service modules</b>	Faculty of Economic and Management Sciences
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	1 lecture per week, 1 practical per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Agricultural Economics Extension and Rural Develo
<b>Period of presentation</b>	Semester 1

#### Module content

Quantitative models for agricultural and environmental policy. This module will introduce students to applications of discrete choice and linear regression models to agricultural and environmental economics. These include demand systems, production functions and treatment effects/impact assessment models. The second part of the class will focus on mathematical programming and numerical methods including but not limited to multisector models, Input-output and programming models and social accounting matrices for consistent production planning, growth, income distribution and trade policy analysis. Computable general equilibrium models.



## Partial equilibrium modelling and commodity market analysis 820 (LEK 820)

<b>Module credits</b>	15.00
<b>Service modules</b>	Faculty of Economic and Management Sciences
<b>Prerequisites</b>	EKT 723 or LEK 810
<b>Contact time</b>	1 lecture per week, 1 practical per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Agricultural Economics Extension and Rural Develo
<b>Period of presentation</b>	Semester 2

### Module content

This module focuses on the modelling of agricultural commodity markets, price determination, policy and trade. The main objective is to provide the basic theoretical principles and skills for partial-equilibrium model building and an opportunity to apply these skills. The approach will include:

- 1) Economic theory: The theoretical foundations of each modelling component of a typical commodity balance sheet and set of prices will be emphasised in the design and specification of models; price formation and model closure under alternative equilibrium pricing conditions
- 2) Applied research: Advanced steps in modelling will be emphasised. Throughout the module, applied modelling research will be conducted and presented to gain experience with methods discussed in class. The course applies economic theory and quantitative methods to analyse food and agricultural markets, price, trade and policy issues. The module examines problem formulation, model structure, estimation, and model evaluation applied to demand and supply and to trade and policy interventions.

## Environmental valuation and policy 826 (LEK 826)

<b>Module credits</b>	15.00
<b>Service modules</b>	Faculty of Economic and Management Sciences
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	1 lecture per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Agricultural Economics Extension and Rural Develo
<b>Period of presentation</b>	Semester 2

### Module content

Environmental valuation and policy. This module will review the basic principles of microeconomic theory needed for understanding and analysis of environmental problems, introduce market and non-market techniques of valuation of natural resources and environmental services (hedonic pricing, contingent valuation, transport cost, willingness-to-pay, cost-based techniques, etc.), public goods and environmental externalities, property rights regimes and selection of appropriate environmental policy instruments for management of environmental externalities.

## Agricultural supply chain management 883 (LEK 883)

<b>Module credits</b>	15.00
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**Service modules** Faculty of Economic and Management Sciences

**Prerequisites** No prerequisites.

**Contact time** 1 lecture per week

**Language of tuition** Module is presented in English

**Department** Agricultural Economics Extension and Rural Develo

**Period of presentation** Semester 1 or Semester 2

### Module content

Agricultural supply chain analysis. Explore the evolution of supply chain management in the global food industry. Establish the different ways in which supply chain management can provide a source of competitive advantage at industry level and for individual firms. Examine the crossfunctional and multidisciplinary nature of supply chain management as it applies in the global food industry. Introduce the core elements of the theoretical literature on supply chain management and consider applications in different sectors. Provide students with practical experience in applying the principles of supply chain management to the exploitation of a marketing opportunity, using case examples from the fresh produce and meat sectors. Provide students with practical experience of undertaking a supply chain audit, with a view to establishing an appropriate business strategy for a food manufacturing company.

## The economics of natural resources 886 (LEK 886)

**Module credits** 15.00

**Service modules** Faculty of Economic and Management Sciences

**Prerequisites** LEK 810 or equivalent

**Contact time** 1 lecture per week

**Language of tuition** Module is presented in English

**Department** Agricultural Economics Extension and Rural Develo

**Period of presentation** Semester 2

### Module content

The economics of natural resources. This course will introduce students to the techniques of optimisation overtime, optimal allocation and management of non-renewable and renewable resources, with case studies from Africa. The influence of property rights regimes on optimal natural resource use will also be stressed. The course consists of three main sections: Methods of dynamic optimisation; Theory of exhaustible and renewable resources and growth models; and Property rights and natural resource use with case studies from Africa.

## Selected topics in environmental economics 887 (LEK 887)

**Module credits** 15.00

**Service modules** Faculty of Economic and Management Sciences

**Prerequisites** MIE 780 and EKT 713 or equivalents

**Contact time** 1 lecture per week

**Language of tuition** Module is presented in English



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<b>Department</b>	Agricultural Economics Extension and Rural Develo
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<b>Period of presentation</b>	Semester 2
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**Module content**

Selected topics in environmental economics. This module will introduce students to various issues of special importance in environmental economics and policy with special emphasis on international dimensions. Examples of key themes to be covered include trade and the environment, trans-boundary externalities, global public goods, multi-lateral environmental agreements, international aid, economic growth and environmental change, poverty and the environment, etc. The main objective of the module is to equip students with the appropriate tools for analysing the linkages between economic development, trade and globalization, poverty, economic and environmental policy and environmental change.



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## Curriculum: Final year

### Core modules

#### Dissertation: Agricultural economics 898 (LEK 898)

<b>Module credits</b>	120.00
<b>Service modules</b>	Faculty of Economic and Management Sciences
<b>Prerequisites</b>	No prerequisites.
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Agricultural Economics Extension and Rural Develo
<b>Period of presentation</b>	Year

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The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.