# **MSc Tropical Agricultural Development (Crop Production)**

Awarding Institution: The University of Reading Teaching Institution: The University of Reading Faculty of Life Sciences

6 months Certificate, 9 months PG Diploma,

12 month MSc

Relevance and applicability: For students entering in January 2006

Date of specification: October 2005

Programme Director: Dr P Q Craufurd, Department of Agriculture

Board of Studies: International and Rural Development

Accreditation:

Web site: http://www.rdg.ac.uk/IRDD/ ma9-TAD.htm

# Summary of programme aims

The aims of the programme in Tropical Agricultural Development

- Provide an understanding of the different physical, economic and social environments in which the agriculture of developing countries is managed and improved
- to expose students to the process of identification and examination of the effects of both environmental factors and crop factors on tropical crops and the protection of such crops
- to consider how management can influence yield, productivity and system sustainability.

#### Transferable skills

The programme requires a substantial amount of independent reading, research and study and students are expected to take personal responsibility and show initiative in developing their knowledge and understanding of the field of study. In following this programme students will also have the opportunity to enhance and develop their skills relating to communication (oral and written), presentations, information handling, problem solving, teamwork, and the use of information technology. Students will learn to work independently, under time pressures, and will learn to set priorities and manage their time in order to meet strict deadlines. Career planning, via choice of modules, will be an integral part of the programme.

#### **Programme content**

Postgraduate Certificate (60 credits):

Students take three core modules (30 credits) (APMA46, ASMC01, IDM008) and three optional modules (30 credits) to total 60 credits

Postgraduate Diploma (120 credits):

Students take six core modules (70credits) (APMA49, IDM008, APMA41, APMA46, PSMA1A, ASMC01) and select a further 50 credits from a wide range of modules, subject to satisfying any module pre-requisites, to total 120 credits.

MSc in Tropical Agricultural Development (Crop Production) (180 credits):

Students take six core modules (70credits) (APMA49, IDM008, APMA41, APMA46, PSMA1A, ASMC01) and select a further 50 credits from a wide range of modules, subject to satisfying any module pre-requisites, to total 120 credits from the taught component of the programme. The MSc then additionally involves a dissertation project (APMA50) worth 60 credits.

Module code	Module Title	Credit	Level
<b>Core Modules</b>		S	
APMA49	Farm Management (new)	20	M
APMA41	Agriculture in the tropics	10	M
APMA46	Tropical Crops	10	M
PSMA1A	Tropical Environments	10	M
ASMC01	Quantitative methods for the life sciences	10	M
IDM008	Design of training programmes	10	M
<b>Optional Modul</b>	les		
APME55	Agricultural project planning and management in developing countries	10	M
APME52	Agricultural policies for developing countries	10	M
APMA42	Crop science	10	M
APMA43	Crops and water	10	M
APMA62	Nematodes as pests and beneficials	10	M
PSMAE7	Weed management	10	M
APMA33	Seed science and technology	10	M
APMA40	Crop experimentation	10	M
IDM005	Comparative extension	10	M
IDM004	Communication in development processes and interventions	10	M
Dissertation		•	,
APMA50	Dissertation (MSc TAD (Crop Production)) (new)	60	M

# **Part-time and Modular arrangements**

All students have the modular flexibility described in the 'Programme content' section above. Part-time students may build up their modular credits towards a Certificate, Diploma or MSc over an extended period.

# **Summary of Teaching and Assessment**

Teaching is organised in modules that typically involve a combination of lectures and seminars. Some lecture based modules are supported by workshops or computer lab sessions. Modules are assessed by a combination of course work and/or formal examination. Examinations will normally take place at the beginning of the Summer Term.

The University's taught postgraduate marks classification is as follows:

<u>Mark</u>	<u>Interpretation</u>			
70 - 100%	Distinction			
60 - 69%	Merit			
50 - 59%	Good standard (Pass)			
Failing categories:				
40 - 49%	Work below threshold standard			
0 - 39%	Unsatisfactory Work			

### For Masters Degrees

To pass the MSc students must normally gain an average mark of 50 or more overall including a mark of 50 or more for the dissertation *and have no mark below 40 in Core modules* (APMA49, IDM008, APMA41, APMA46, PSMA1A, ASMC01). In addition the total credit value of all modules marked below 40 must not exceed 30 credits and for all modules marked below 50 must be less than 60 credits.

Students who gain an average mark of 70 or more overall including a mark of at least 60 in the dissertation and have no mark below 40 will be eligible for a Distinction. Those gaining an average mark of 60 or more overall including a mark of at least 50 in the dissertation and have no mark below 40 will be eligible for a Merit.

# For PG Diplomas

To pass the Postgraduate Diploma students must normally gain an average mark of 50 or more *and have no mark below 40 in Core modules* (APMA49, IDM008, APMA41, APMA46, PSMA1A, ASMC01). In addition the total credit value of all modules marked below 40 must not exceed 30 credits and for all modules marked below 50 must be less than 60 credits.

Students who gain an average mark of 70 or more and have no mark below 40 will be eligible for the award of a Distinction. Those gaining an average mark of 60 or more and have no mark below 40 will be eligible for a Merit.

#### For PG Certificate

To pass the Postgraduate Certificate students must normally gain an average mark of 50 or more. In addition the total credit value of all modules marked below 40 must not exceed 10 credits

# Summary of teaching and assessment

Teaching is organised in modules. The delivery of materials takes a variety of forms including lectures, classes, seminars and group exercises.

Assessment is modular and involves coursework and for some modules unseen examinations. The nature of the assessment is determined by the aims of the module.

A dissertation supervisor is appointed for each student.

#### **Admission requirements**

Entrants to this programme are normally required to have obtained an honours degree or its equivalent in agriculture, plant sciences or a related subject but applicants with other qualifications as may be approved by the Senate, and who have at least 2 years' professional experience in a relevant field of development work are also eligible to apply for admission to this programme. References are also taken into account.

Admissions Tutor: The Programme Director is responsible for admissions

#### Support for students and their learning

University support for students and their learning falls into two categories. Learning support includes IT Services, which has several hundred computers and the University Library, which across its three sites holds over a million volumes, subscribes to around 4,000 current periodicals, has a range of electronic sources of information and houses the Student Access to Independent Learning (S@IL) computer-based teaching and learning facilities. There are language laboratory facilities both for those students studying on a language degree and for those taking modules offered by the Institution-wide Language Programme. Student guidance and welfare support is provided by Programme Directors, the Careers Advisory Service, the University's Special Needs Advisor, Study Advisors, Hall Wardens and the Students' Union.

A Study Skills module is available to support learning throughout the taught component of the programme and to develop independent learning skills required for successful completion of the Dissertation

# **Career prospects**

Graduates of the MSc in Tropical Agricultural Development (Crop Production) are well suited to careers in agricultural research within international and national institutions, in governmental and non-governmental organisations operating in the tropics, and in international development charities.

#### Opportunities for study abroad or for placements

With the agreement of the supervisor, students may be allowed to study abroad or take up placements during the Summer Term as part of their dissertation work. The MPhil thesis usually involves a placement in the tropics for about 12 months.

#### Educational aims of the programme

The Tropical Agricultural Development programme is designed to provide an understanding of the different physical, economic and social environments in which the

agriculture of developing countries is managed and improved. It also describes the processes of agricultural production and the ways in which they are modified and constrained by environmental characteristics. The focus is on agriculture in the tropical and sub-tropical regions of the developing world, principally in Africa, Asia and Latin America

## **Programme Outcomes**

### **Knowledge and Understanding**

# A. Knowledge and understanding of:

- 1. The theory and practice of farm business management and of developing training programmes
- 2. The influence of scientific, economic, physical, social and political environments in which agricultural development occurs
- 3. Agricultural development in tropical regions and the contribution of crop science to development
- 4. The mechanisms of yield accumulation and how these are influenced by the environment
- 5. The effects of environmental and soil factors on the growth, development and yield of crops

## Teaching/learning methods and strategies

Mixture of lectures, seminars, directed reading, group and individual project work, individual and group presentation, guided readings and guidance on key sources of reference material. Feedback and guidance are important elements complementing and emphasis on self-directed study.

#### Assessment

By coursework and, in some cases, formal examinations; coursework to include essay assignments and presentations

## Skills and other attributes

### **B.** Intellectual skills – able to:

- 1. Structure, analyse and evaluate theoretical and conceptual issues and the bases for their relevance in the context of agricultural development and training
- 2. Think logically and analytically to understand agricultural production and farm business management processes
- 3. Identify key agricultural approaches and evaluate them with reference to practice and outcome and to science and management
- 4. Comprehend the rapidly-changing patterns of agriculture and the factors influencing the pace of change

#### Teaching/learning methods and strategies

Students are frequently challenged in all teaching situations to complete logical arguments, analyse problems, seek and evaluate alternative explanations, and justify held beliefs. Long essay, debate, group work and presentations provide the principle vehicles by which intellectual skills are developed.

#### Assessment

By formative tests and presentations. Other assignments, including coursework and, in some cases, formal examinations; dissertation

#### **C. Practical skills** – able to:

- 1. Evaluate the bases of agricultural production and management
- 2. Evaluate the bases of training programme development
- 3. Evaluate the appropriateness and effectiveness of alternative agricultural production and management strategies
- 4. Effectively apply a range of frameworks useful in the planning, implementation, monitoring and evaluation of agricultural development and training
- 5. Identify, access, evaluate, synthesise, analyse, collate and represent data relevant to the critical evaluation of agricultural development

#### **D.** Transferable skills – able to:

- 1. Communicate knowledge and opinions effectively to a wide range of people through choosing and using among a variety of means
- 2. Reflect and evaluate his/her own academic progress and its implications for emerging/changing professional practice
- 3. Identify, access, evaluate, synthesise, analyse, collate and represent data relevant to the issue at hand.
- 4. Manage time and prioritise workloads in the context of changing demands

## Teaching/learning methods and strategies

Students are required to undertake and understand a wide range of reading, from traditional published sources, web-based material and other grey literature relating to development policy and practice. This includes both directed reading and through researching their own sources of information. Discussion in lectures and seminars emphasises the use of empirical evidence, and the strengths and weaknesses of alternative theories, methodologies and practices.

1-5 are achieved through lectures, seminars, presentations, case studies, group work, and dissertation

Assessment

Long essays, presentations and unseen examinations

# Teaching/learning methods and strategies

The presentation of well-researched written work is a fundamental element of the programme and requires the application of all the skills listed in 1-5. This is complemented and reinforced by enhanced oral skills, developed through lecture and seminar discussions, tutorials and group activities

Assessment

By formative tests and presentations. Other assignments, including coursework and, in some cases, formal examinations; dissertation

Please note - This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the module description and in the programme handbook. The University reserves the right to modify this specification in unforeseen circumstances, or where the process of academic development and feedback from students, quality assurance processes or external sources, such as professional bodies, requires a change to be made. In such circumstances, a revised specification will be issued.