

## **MSc in Agriculture and Development (full-time)** **For students entering in 2017/8**

Awarding Institution:	University of Reading
Teaching Institution:	University of Reading
Programme length:	1 year
Date of specification:	16/10/2017
Programme Director:	Dr Alistair Murdoch
Board of Studies:	Graduate Institute of International Development, Agriculture and Economics

### **Summary of programme aims**

The aim of this MSc course is to enable students to explain the role of agriculture and of agricultural research for development in the context of the research-to-development continuum. A flexible programme is offered, including a Horticulture pathway. More specifically, students will be able to:

- Explain the role and contributions of agriculture (including horticulture) to human development as: an economic activity, a source of food, nutritional and livelihood security, a provider of ecosystem services, and a way of life;
- Describe the different physical, economic and social environments in which the agriculture of developing countries is managed and improved;
- Elaborate the recent developments in agricultural research in response to international challenges such as climate change, environmental sustainability, ecosystem services, and globalization;
- Evaluate the factors and processes that influence the use of agricultural knowledge, science and technology for development, and explain how to enhance the relevance, quality and impact of agricultural scientific research.

### **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 enhance their professional capability in working effectively in their chosen field of expertise along the research-to-development continuum. Students will learn to work independently, under time pressures, and will learn to set priorities and manage their time in order to meet deadlines. Students will also have opportunities to enhance and develop their skills relating to teamwork, communication (both oral and written), presentations, information handling, experimental design for agriculture, data collection, data analysis and interpretation, problem solving, scientific writing, and the use of information technology.

### **Programme content**

The programme can be tailored to match a wide range of interests including a Horticulture pathway.

**Postgraduate Certificate in Agriculture and Development:**

The Postgraduate Certificate programme is a flexible programme comprising any 60 credits drawn from the MSc Agriculture and Development taught modules (excluding the dissertation) subject to agreement by the Programme Director.

**Postgraduate Diploma in Agriculture and Development:**

The Postgraduate Diploma programme is a flexible programme comprising any 120 credits drawn from the MSc taught modules (excluding the dissertation) subject to agreement by the Programme Director.

**MSc in Agriculture and Development:**

Students take five modules comprising (i) APMA41, (ii) APMA93 or APMA98, (iii) APMA103, (iv) IDM095 and (v) IDM071 to total 70 credits 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 (IDM072) worth 60 credits.

### **Horticulture Pathway:**

Flexible Postgraduate Certificate (60 credits) and Postgraduate Diploma (120 credits) programmes are also available in the Horticulture Pathway with modules selected as described above.

**MSc in Agriculture and Development: Horticulture pathway**

Students take five compulsory modules (APMA41, APMA98, APMA103, IDM095 and IDM071) to total 70 credits 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 on a horticultural topic (IDM072) worth 60 credits.

Students with no previous knowledge of horticulture will be encouraged to attend the lectures of a Level 4 module on the Principles of Horticulture.

*Compulsory Modules (130 credits)*

<i>Code</i>	<i>Module title</i>	<i>Credits</i>	<i>Level</i>
IDM095	Theories and Practices of Development	20	7
IDM071	Research and Study Skills for Independent Study	10	7
APMA41	Agriculture in the Tropics	10	7
APMA93 or APMA98	Experimental Agriculture or Experimental Horticulture	10	7
APMA103	Rethinking Agricultural Development (including Horticulture)	20	7
IDM072	Dissertation	60	7

*Optional modules (students select 50 credits)\**

APME40	Qualitative Research Methods	10	7
APME72	Agricultural Project Planning and Management in Developing Countries	20	7
APMA90	Climate Change and Food Systems	10	7
APMA104	Principles of Integrated Pest Management	20	7
APMA105	Horticultural Crop Technology	10	7
IDM066	Communication and Innovation for Development	10	7
IDM077	Food Security and Development	10	7
IDM013	Participatory Interventions in Development	10	7
APMA89	Water, Agriculture and Irrigation	10	7

Students with interests in soil science or livestock may take:

GVMEPM	Environmental and Pollution Microbiology [of soil]	10	7
AP3A67	Animal Welfare	10	6

Support Module (non-credit bearing)

IDM089	Personal and Professional Development for International Students**	0	7
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*\*The modules listed above are a sample of the modules available - students may select up to 20 of their optional credits from the modules in the module guide subject to timetabling constraints.*

*\*\*the Personal and Professional Development programme is for international students (although employability events are open to all students)*

**Part-time or 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 (normally two years).

**Summary of Teaching and Assessment**

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

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.

**Degree Certification and Assessment**

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

<b>Mark</b>	<b>Interpretation</b>
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 Degree**

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. 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 not exceed 55 credits.

Students who gain an average mark of 70 or more overall including a mark of 60 or more for 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 50 or more for 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. 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 not exceed 55 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.

### **Admission requirements**

Entrants to this programme are normally required to have obtained an honours degree or its equivalent in agriculture, forestry, botany, biological, soil, environmental, or social sciences; in rural development, development planning and management or a related subject. Applicants with other qualifications and who have at least 2 years' professional experience in a relevant field of agriculture and development 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 is provided by a wide array of services across the University, including: the University Library, In-session English Support Programme, the Study Advice and Mathematics Support teams and IT Services. 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 Personal Tutors, School Senior Tutors, the Students' Union, the Medical Practice and the Support Centres. If a student has a general enquiry and is unsure where to seek help, they should visit their Support Centre. There are five Support Centres across the University, including one based at the London Road Campus. The Support Centre will be able to advise on matters such as extenuating circumstances, module selection, suspensions, withdrawals, timetable queries and transferring programme. The Support Centre will also be able to signpost students to Carrington building where other University services related to disability, financial support, counselling and wellbeing, accommodation and careers can be found. More information on what student services are available can be found here: <http://student.reading.ac.uk/essentials>.

A comprehensive 'Programme Handbook', which includes a detailed outline of the programme, its constituent modules and assessment guidelines, can be found on the Graduate Institute's Blackboard site. Day to day queries regarding academic matters (e.g. time-tabling) should be addressed in the first instance to the Support Centre (GU06) in the Agriculture Building or, where necessary, the Programme Director.

A Research and Study Skills (IDM071) 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. Further support (including English language) is provided to International Students through a Personal and Professional Development module (IDM089).

### **Career prospects**

Graduates from the MSc in Agriculture and Development are well suited to careers in agriculture or horticulture within international and national institutions, in governmental and non-governmental organisations, and in international development and humanitarian assistance agencies. Some go on to work for commercial companies and, in most years, some use the MSc as a starting point for a PhD.

### **Opportunities for study abroad or for placements**

With the agreement of their dissertation supervisor, students may be allowed to study abroad or take up placements during the Summer Term as part of their dissertation work. Funding to support these placements can be applied for although funding is not guaranteed.

## **Programme Outcomes**

### **Knowledge and Understanding**

#### **A. Knowledge and understanding of:**

1. Agricultural development of farming systems in developing countries and the contribution of science to sustainable agricultural development
2. The influence of the physical, socio-economic and political environments in which planned development interventions take place
3. The effects of environmental and soil factors on the sustainability of food production through agriculture and horticulture in the context of both current environments and climate change.

#### **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. Outside visits are organised to complement these approaches and see development and practice of agriculture and horticulture in the UK.

#### *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 scientific issues and their relevance in the context of agricultural technologies and planned development interventions
2. Think logically and analytically and to understand different approaches to in relation to the process of agricultural development
3. Identify key agricultural technologies and approaches and evaluate them critically with reference to practice, development outcome and sustainability
4. Comprehend the rapidly evolving discourse of development and the factors influencing both the change and 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. Experimental design and implementation, essay, critical review, scientific writing, debate, group work and presentations provide the principal vehicles by which intellectual skills are developed

#### *Assessment*

By formative tests, reports and presentations. Other assignments, including coursework and, in some cases, formal examinations; dissertation and writing as for a peer-reviewed academic journal

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

1. Evaluate the bases of alternative technologies and policy approaches to agricultural development
2. Design, carry out, analyse and write report on an agricultural/horticultural experiment strategies including use of a relevant statistical software package

#### **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 agricultural technologies and development. This includes both directed reading and through researching their own sources of information. Discussion in lectures and seminars and in practical classes emphasises the use of

3. Understand how to evaluate and test relevance, appropriateness and effectiveness of alternative agricultural development implementation strategies
4. Effectively apply a range of frameworks useful in the planning, implementation, monitoring and evaluation of development interventions and processes
5. Identify, access, evaluate, synthesise, analyse, collate and represent data to answer research questions or test hypotheses relevant to the critical evaluation of agricultural development policy and practice

**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 or the hypothesis being tested
4. Manage time and prioritise workloads in the context of changing demands

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, report and paper writing 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 B-D. This is complemented and reinforced by enhanced oral skills, developed through lecture and seminar discussions, tutorials and group and individual activities and experiments.

*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 process or external sources, such as professional bodies, requires a change to be made. In such circumstances, a revised specification will be issued.**