

# EC400-30 Statistics Masters Dissertation in Economics

**23/24**

**Department**

Economics

**Level**

Undergraduate Level 4

**Module leader**

Jonathan Cave

**Credit value**

30

**Module duration**

22 weeks

**Assessment**

Multiple

**Study location**

University of Warwick main campus, Coventry

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## Description

### Introductory description

This module is core for students on the MMathStat degree and optional core for students on an MMORSE degree. It is not available as an unusual option for other students.

In this module you will carry out a significant project over the course of terms 1-3 on a topic of specialist interest. You will be provided with an opportunity to express preferences for your project during the preceding academic year and will be allocated to a project / supervisor before the start of the academic year.

### Module aims

To allow students to integrate, apply and extend knowledge and skills gained in the taught component of their degree and mastery of some element of Economics. To give students an introduction to research in the discipline.

### Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be

covered. Actual sessions held may differ.

Students will be allocated a dissertation supervisor in the Department of Economics. The module will entail regular supervisory meetings as well as independent study and research on a chosen topic and the writing of the dissertation. The dissertation will develop a topic within economics, mathematics and statistics. Students will be provided with a list of available topics but may suggest their own provided this is agreed with the supervisor.

## Learning outcomes

By the end of the module, students should be able to:

- Produce an extended piece of academic writing with appropriate referencing of literature sources;
- Conduct a literature review on a selected topic;
- Plan and develop an advanced project themed in Economics;
- Demonstrate an in-depth understanding of an advanced topic in Economics;
- Understand, apply and evaluate theory and methodology of relevant literature, showing good judgement in their selection, application and interpretation;
- Communicate the results of advanced scholarship or research to a specialist audience;

## Research element

Plan and develop an advanced project on a topic of economic relevance;

## Interdisciplinary

Projects may involve the application of methods from Applied Mathematics and/or Statistics to economic research questions, based on economic data or involving methods of mathematical economics.

## Subject specific skills

Probability, Statistics or other Applied Mathematics research skills.

## Transferable skills

Your Integrated Masters Dissertation is an opportunity to develop a range of transferable skills (link to <https://warwick.ac.uk/fac/sci/transferable-skills/more-transferable/>) such as communicating orally, writing for your peers, project organisation and time management or creative and independent thinking. These skills will be worthwhile whether your career is research-orientated or applied and based in academia, business or government.

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# Study

## Study time

Type	Required
Lectures	4 sessions of 30 minutes (1%)
Project supervision	10 sessions of 1 hour (5%)
Supervised practical classes	2 sessions of 1 hour (1%)
Private study	186 hours (93%)
Total	200 hours

## Private study description

Find, read and evaluate literature, plan and develop research question, (as appropriate) identify and collect data, carry out analysis, evaluate and interpret findings, communicate results and write dissertation.

## Costs

No further costs have been identified for this module.

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## Assessment

You do not need to pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

## Assessment group A2

	Weighting	Study time	Eligible for self-certification
Oral Presentation	15%	10 hours	No
Written Dissertation	75%	80 hours	No

You will prepare and deliver a presentation about your dissertation project to a small audience of your peers and academic staff during a scheduled 2 hour session in week 9 or 10 of term 2. Your presentation will last 12 minutes and will be followed by questions from the audience.

Due in Term 3 Week 2 You will produce a written dissertation on your research project at a level of exposition and technical detail appropriate for another student within the same cohort. 500 words is equivalent to one page of text, diagrams, formula or equations; your dissertation is likely to be between 40-80 pages in length. Up to 10% of the mark awarded for the dissertation will

	<b>Weighting</b>	<b>Study time</b>	<b>Eligible for self-certification</b>
reflect the extent to which you took intellectual ownership of the project; this is an academic judgement on your quality of understanding beyond that evidenced in the written assessment components of the dissertation.			
Workflow Report	10%	10 hours	No
Due in Term 1 Week 10. You will produce a workflow report to summarise the topic of your dissertation along with the aims and associated steps in order to complete the dissertation. Your report should be minimal in technical detail, and should be at a level of exposition that another student within the same cohort could read and understand. 500 words is equivalent to one page of text, diagrams, formula or equations; your workflow report should not exceed 6 pages in length.			

## Assessment group R1

	<b>Weighting</b>	<b>Study time</b>	<b>Eligible for self-certification</b>
Written Dissertation and/or Oral Examination	10%		Yes (extension)
If you do not pass the module you will be allowed to resubmit your dissertation and may additionally be given an opportunity to demonstrate your ability to meet the learning outcomes of the module during an oral examination.			
Written Dissertation	15%		Yes (extension)
If you do not pass the module you will be allowed to resubmit your dissertation and may additionally be given an opportunity to demonstrate your ability to meet the learning outcomes of the module during an oral examination.			
Written Dissertation	75%		Yes (extension)

## Feedback on assessment

Face-to-face feedback will be given on the workflow report component by individual arrangement with supervisor.

A short feedback report will be provided for the presentation within 20 working days.

Written feedback will be given on the written dissertation following the examination board.

## Availability

### Anti-requisite modules

If you take this module, you cannot also take:

- ST421-30 Data Science Masters Dissertation
- IB403-30 Dissertation (MMORSE)
- ST415-30 Statistics Masters Dissertation

## Courses

This module is Core optional for:

- USTA-G300 Undergraduate Master of Mathematics, Operational Research, Statistics and Economics
  - Year 4 of G30A Master of Maths, Op.Res, Stats & Economics (Actuarial and Financial Mathematics Stream)
  - Year 4 of G30B Master of Maths, Op.Res, Stats & Economics (Econometrics and Mathematical Economics Stream)
  - Year 4 of G30C Master of Maths, Op.Res, Stats & Economics (Operational Research and Statistics Stream)
  - Year 4 of G30D Master of Maths, Op.Res, Stats & Economics (Statistics with Mathematics Stream)
- USTA-G301 Undergraduate Master of Mathematics, Operational Research, Statistics and Economics (with Intercalated
  - Year 5 of G30E Master of Maths, Op.Res, Stats & Economics (Actuarial and Financial Mathematics Stream) Int
  - Year 5 of G30F Master of Maths, Op.Res, Stats & Economics (Econometrics and Mathematical Economics Stream) Int
  - Year 5 of G30G Master of Maths, Op.Res, Stats & Economics (Operational Research and Statistics Stream) Int
  - Year 5 of G30H Master of Maths, Op.Res, Stats & Economics (Statistics with Mathematics Stream)