Economics Year 1 Unit Selection, 2020/21

Here we will attempt to answer all questions Year 1 students may have regarding their unit selection and option choices.

# Mathematics and Statistics

Mathematics and statistics are crucial tools for every economist and as an economics student you will have to take compulsory units in these subjects. Which route you take is not your choice but depends on how much mathematics (not statistics!) you have done before you come to University (see the Table below).

**Route Intro**

ECON10061 Introductory Mathematics (Semester 1)
SOST10062 Introductory Statistics (Semester 2)

Or

**Route Advanced**

ECON10071 Advanced Mathematics (Semester 1)
ECON10072 Advanced Statistics (Semester 2)

For neither route we have any expectation that students have covered any statistics.

**Important Note:**

Students that enter Route Intro will have to follow up with second year mathematics and statistics course units (2nd year versions of Advanced Mathematics and Advanced Statistics) if they wish to specialise in economics and attain the mathematics and statistics prerequisites for many higher level economics options.

## Which route is for me?

The following table illustrates how the highest mathematics qualification determines the Route to choose.

|  |  |
| --- | --- |
| Highest Qualification | Route |
| GSCE Maths | Route I |
| AS level Maths (grade B and above) | Route A |
| AS level Maths (grade C and below) | Talk to an advisor |
| A level Maths | Route A |
| IB Mathematical Studies SL | Route I |
| IB Mathematics SL | Route A |
| IB Mathematics HL | Route A |
| IB Further Maths SL | Route A |

For students who enter the program with another qualification the following question may be used to differentiate

**Question**: Have you learned how to differentiate the following functions?

1. y = 2 + 5 ∙ 3 ln(5x) and
2. y = (7x + e7x)/x4

Yes -> Route A
No -> Route I

The key skill is for students to have covered calculus (differentiation) at an intermediate level as knowledge of all differentiation rules (addition, product, quotient, chain rules) is assumed.

In doubt there is always the option of letting students enrol in one course and change inside the first two weeks in case the level is inadequate. The first two lectures may reveal more information than any pre-semester talk.

The criterion, however, is whether students have covered the respective material and not whether they can recall everything at the moment. We expect students to revise previously acquired knowledge that was used as part of their university application.

# Further Mathematics and Statistics options and future years

Students should also be aware of the optional course units in Semester 2:

**SOST10142 Applied Statistics for Economists**

This is available to those students who enter Maths on Route Advanced. This is an applied statistics course unit which will require students to actively work with a statistical analysis computer package.

[**ECON10192 Introduction to Mathematical Economics**](https://my.manchester.ac.uk/uPortal/f/mylearning/p/course-unit-info.u29l1n5206/max/render.uP?pP_location=%2FCourseUnitPublishing%2FCourseUnitDataFiles%2FECON%2F037896ECON101922020-07-291V6.xml&pP_action=viewCUDetails)

This is available to those students who enter Maths on Route Advanced.

In this unit you will introduce you to mathematical proofing concepts and hence expand your toolbox required to study Mathematical Economics and 2nd year Economic Analysis units (such as ECON20501 Microeconomic Analysis.

This unit is pre-requisite for the 2nd year ECON20120 Mathematical Economics unit.
Students who enter through Route Intro will be able to take a second year version of Introduction to Mathematical Economics which in turn is pre-requisite to a third year version of Mathematical Economics.

# Micro- and Macroeconomics units

For most degrees you will not have a choice about your Micro- and Macroeconomics units. If you are on the BA (ECON) you take the Micro- and Macroeconomics units and if you are on the BSc Economics you take the Micro- and Macroeconomic Analysis units. If you have any doubt whether you are on the right programme you should seek a conversation with your academic advisor as quickly as possible and certainly inside the first week of term.

## BA (ECON) students

**Microeconomics and Macroeconomics 1 to 4**, have just been redesigned after consultation with students, employers and staff. In particular these units will emphasise how the economic toolset is applied to current problems (such as Brexit, Environmental Issues and Inequality). The focus will be on policy implications of the economic theory that is being taught.

As you go along you will have to develop all the necessary quantitative skills that are required for a modern economist. Once you come to your third year these course units will give you access to a wide range of specialist economics options.

These are the appropriate course units for the vast majority of Economics students. If you do well on your degree you will have access to all major economics postgraduate programmes and to a huge variety of different jobs to which you will come with well-developed general employability skills, in particular the ability to relate your economics knowledge to everyday topical issues and problems.

## BSc Economics students

The core economics units on this programme are called **Microeconomic or Macroeconomic Analysis 1 to 4**. In this stream economics will be taught according to more traditional lines. While these course units will, of course, also touch on current problems and policy issues, the emphasis is on the development of the economic theory and the quantitative analysis.

Once you come to your third year these course units will give you access to a wide range of specialist economics options. If you do well on your degree you will have access to all major economics postgraduate programmes and to a huge variety of different jobs to which you will come with well-developed general employability skills. Having studied these courses will ensure that you have an extra strong quantitative skills set which is appreciated in a range of industries and jobs.

As a BSc student you also study on **ECON10011 Studying Economics** and **ECON10162 Applied Economics**.

# Other ECON Year 1 options

When you study economics we ask you to take a significant number of compulsory economics options. For economists it is important to be able to relate their specialist economics knowledge to a wider context and hence you should or have to consider taking options from other departments.

The economics department offers the following two additional options

## [ECON10151 Computing for Social Scientists](https://my.manchester.ac.uk/uPortal/f/mylearning/p/course-unit-info.u29l1n5206/max/render.uP?pP_location=%2FCourseUnitPublishing%2FCourseUnitDataFiles%2FECON%2F004449ECON101512019-09-191V13.xml&pP_action=viewCUDetails)

This course will help students to obtain proficiency in the use of Microsoft Word and Microsoft Excel. These skills are crucial skills in order to be productive throughout your degree and indeed for any future jobs.

**Microsoft Word**

During your studies you will be asked to write essays and proficiency with Word is important such that you can concentrate on the vital content of your essay.

This unit will cover topics such as:

* how to use the equation editor,
* how to use styles and
* how to use Endnote referencing software

**Microsoft Excel**

A spreadsheet software such as Excel is a crucial tool in any course unit and job which deals with data. In your statistics and econometrics course units (ECON10072, SOST10062, ECON20222 or ECON20110). But it will also be useful for finance units and any other unit in which you are handling real-life data. This unit will cover topics such as:

* formulas
* charts and
* Excel’s solver tool (with economics applications),
* financial applications (e.g., computing present values and internal rates of return) and
* more advanced topics such as VLOOKUP and PivotTables.

Students should take this course if they would like to gain proficiency in these topics. However, if they are already pretty comfortable using Word and Excel, they shouldn’t take the course.

## [ECON10002 An Introduction to Development Studies](https://my.manchester.ac.uk/uPortal/f/mylearning/p/course-unit-info.u29l1n5206/max/render.uP?pP_location=%2FCourseUnitPublishing%2FCourseUnitDataFiles%2FECON%2F002569ECON100022020-07-291V14.xml&pP_action=viewCUDetails)

This course aims to provide a self-contained introduction to the academic study of development for general social scientists and to cover the preparatory material for more advanced development courses in the second and third years.

You will read seminal works in the area of development economics and learn to understand how they relate to topical policy topics.

## [ECON10212 Economic History](https://my.manchester.ac.uk/uPortal/f/mylearning/p/course-unit-info.u29l1n5206/max/render.uP?pP_location=%2FCourseUnitPublishing%2FCourseUnitDataFiles%2FECON%2F038487ECON102122020-08-031V10.xml&pP_action=viewCUDetails)

This unit will provide an introduction to key developments in the history of economics. As such it will provide insights into how economic ideas and analysis can explain or help to understand important historic events. This will allow you to examine how economies have operated and functioned in the past, and consider the value of these insights from economic history for today.