

The Further Mathematics Support Programme

# Decision/Discrete for A Level Further Mathematics

**Course Tutors: James Morris, Sinéad Vaughan, Sue de Pomerai & Jeff Trim (FMSP Area Coordinators/Central Team)**

**University College London.**

**09:30 – 16:00 Thursday July 12<sup>th</sup> 2018**



Feedback from previous courses:

“Superb. I feel empowered.”

“Has been a great experience; very beneficial.”

“The resources and having a go at questions was particularly helpful”

“I really appreciated the discussion around potential student pitfalls”

**This course will support teachers offering Discrete and Decision Further Mathematics at A Level. An understanding of graph theory, algorithms on networks and (graphical) linear programming is assumed.**

[The title Discrete Mathematics, Decision Mathematics and Modelling with Algorithms are now being used by different Further Mathematics awarding organisations for Further Mathematics components containing similar material.]

## **Is this course for you?**

This course assumes knowledge of graph theory, algorithms on networks and (graphical) linear programming is assumed. We are offering a course on 5<sup>th</sup> July to support teachers new to this content (see [www.furthermaths.org.uk/london\\_CPD](http://www.furthermaths.org.uk/london_CPD)).

This course is suitable for the new (2017) Further Mathematics specifications.

This course may also be suitable for you if you haven't seen the material for years and would like a refresh. Please see below for specific course content.

**Course aims:**

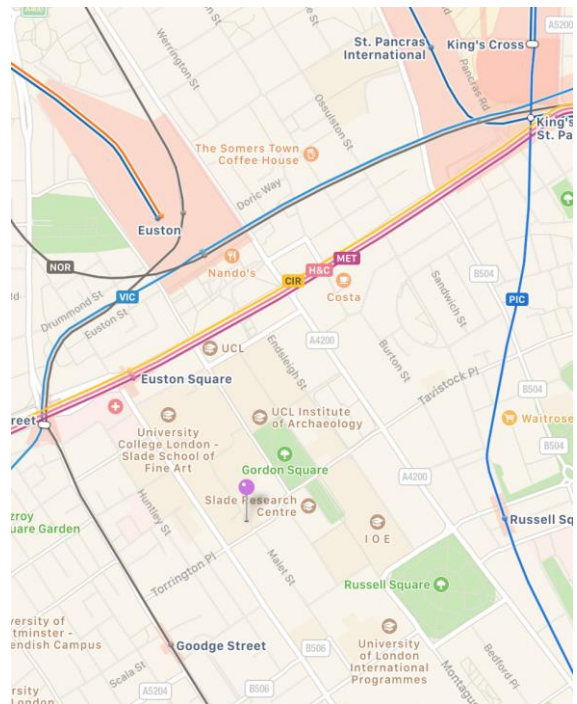
- To cover common key ideas from the A Level Further Maths specifications.
- To introduce teachers to teaching ideas and resources to support decision/discrete mathematic.
- To provide hints for preparing students for decision/discrete mathematics exams

**Course Content:**

This course was originally advertised at the start of 2018 with the promise that we would aim to tailor the day depending on the exam boards represented. As a result, the day will be useful to teachers of all exam boards, but we have planned two routes through the day for AQA and Edexcel teachers. If you are an OCR or OCR (MEI) teacher and would like more details of how the day may be useful to you, please contact James (details below).

**Provisional timetable for the day:**

9:30	Arrival & Refreshments	
9:50	Introduction	
10:00	Planarity & Graph Theory	
10:45	Traveling Sales Person	
11:30	Break & refreshments	
11:45	Introduction to the Simplex Algorithm	
12:45	Lunch (provided)	
	<b>Edexcel</b>	<b>AQA</b>
13:30	Big M Methods & Two Step (Simplex Algorithm)	Game Theory
14:30	Break & refreshments	
14:45	Floyd's Algorithm	Group Theory
15:45	Evaluations	
16:00	Close	



**Venue:** University College London (see map).



### **Course/event fees and application:**

Fees for this course will be £50 per teacher (£100 if your school/college is not registered with the FMSP). Registration is quick, easy and free at [www.furthermaths.org.uk/register](http://www.furthermaths.org.uk/register).

The booking form gives you the opportunity to express interest. Please complete this if you would like to attend but need to seek permission from school first. We will do our best to save you a place! To book a place or express interest please complete the form at <https://goo.gl/forms/2Toe3ujtyoffSACh1>.

### **Further information**

If you have any questions about this event, please email James Morris on [jamesmorris@furthermaths.org.uk](mailto:jamesmorris@furthermaths.org.uk).

Information about all our CPD can be found at <http://www.furthermaths.org.uk/cpd>.