



Online 'Oxford Maths Entrance Test' Course Autumn 2011

The MEI will be running a six-week **online** preparation course for the **Oxford Maths Entrance Test** during the first half of the Autumn Term. The course will be delivered live in real time using a *Blackboard Collaborate* (formerly *Elluminate*) virtual classroom.

Each week there will be a one-hour live session which will concentrate on a particular aspect of the entrance test. **Sessions will be held on Mondays – see below for detailed programme – from 5.00 pm to 6.00 pm.** Prospective students should ensure that they are available to participate at these times and dates. Each successful applicant will be sent full details of how to participate in the course, including how to log in to the *Blackboard Collaborate* virtual classroom.

Students will be expected to:

- work through questions prior to a session
- follow-up sessions by filling in any gaps
- download materials from the Oxford University Mathematical Institute website:

<http://www.maths.ox.ac.uk/prospective-students/undergraduate>

The course is intended for students applying for Oxford degree courses in

Mathematics, Mathematics & Statistics or Mathematics & Philosophy

The Entrance Test is set with the aim of being approachable by all students, including those without Further Mathematics A-level, and those from other educational systems (e.g. International Baccalaureate and Scottish Highers). It aims to test the **depth of mathematical understanding** of a student in the fourth term of their A-levels (or equivalent) rather than a breadth of knowledge.

Students applying for any of the above courses will need to answer the first five questions of the entrance test. This course is designed to equip students, with at least an AS Level in Mathematics or equivalent, to develop their mathematical thinking and so gain confidence in tackling these questions.

[The course is *not* intended for students applying for Oxford degree courses in Computer Science or Mathematics & Computer Science, but will cover *some* of the topics required for the entrance paper.]

Following each session, students will receive by email a copy of the PowerPoint presentation used in that session, which will include 'dynamic' worked solutions for questions discussed within the session. This is ideal for students who wish to work through the material at their own pace.

Note that the Oxford University Mathematical Institute publish solutions to the Specimen Papers and to the actual papers set in 2006, 2007, 2008, 2009 and 2010.

The course tutor has substantial experience of working with students at this level.

Oxford Maths Entrance Test Course Programme 2011

Date	Topic
Monday 12 th September	Multiple choice questions and algebra
Monday 19 th September	Functions and calculus
Monday 26 th September	Thinking outside the box
Monday 3 rd October	Detailed consideration of the 2007 paper
Monday 10 th October	Detailed consideration of the 2008 paper
Monday 17 th October	Detailed consideration of the 2009 paper

The **2010** paper will be used as a 'mock' exam. Students will be sent worked solutions towards the end of the half-term break.

The actual entrance test will be taken on **Wednesday, 2nd November, 2011**.

Details of *Blackboard Collaborate*

A package called *Blackboard Collaborate* will be used to provide the sessions. *Blackboard Collaborate* allows tutor and student to communicate in audio, by handwriting on a shared virtual whiteboard and by instant messaging. We use *Blackboard Collaborate* because it is a well-established package that is easy to use, and which has extensive support and optimum features, which include:

- ✓ **Shared whiteboard**
- ✓ **Audio conferencing**
- ✓ **Instant messaging**
- ✓ **Application sharing**
- ✓ **A graphical calculator**



All that is needed to participate in these sessions is a broadband internet connection.

A simple headset, or headphones and a microphone, is needed to communicate in audio.

For this course, students are not expected to speak, so a set of speakers or headphones will suffice.

How to apply

The fee for the course is **£50**. To apply students must complete an application form which may accompany this information leaflet. Please complete and post the form, along with a cheque or payment details for the course fees to MEI. The use of *Gifted and Talented* funding is appropriate for this.

The number of places is limited, so will be allocated on a "first-come, first-served" basis. All successful applicants will be sent further details of the course by email, including instructions on how to use the *Blackboard Collaborate* virtual classroom and what they need to do prepare for the first session.

If you require any further information, including an application form, then please contact the course tutor, Bob Francis, by emailing: ooo@mei.org.uk.