

STEP/AEA/MAT Factsheet

The Sixth Term Examination Paper (STEP) Overview

This was developed to replace the old Cambridge scholarship and entrance examinations that were required for entry around 25 years ago. It is now a well-established examination that is used in conditional offers for both the University of Cambridge and the University of Warwick. Some other universities encourage students to take STEP papers.

The STEP papers are designed to test candidates on questions that are **similar in style to undergraduate mathematics**.

The Advanced Extension Award (AEA) Overview

AEAs were introduced in 2002 in response to the Excellence in Cities report, as a means of testing students against standards comparable with the most demanding to be found in other countries. Some universities use AEA as a means to differentiate between able students.

AEA papers are aimed at the most able A level students (top 10%) to provide challenge and opportunities for students to demonstrate greater depth of understanding than that required at A level.

The Mathematics Admissions Test (MAT) Overview

The MAT is a subject-specific admissions test for applicants to the University of Oxford's courses in Mathematics, and Computer Science (and some of their joint degrees). Since 2013, Imperial College London have also used the MAT as part of their entry requirements.

The MAT is set with the aim of being approachable by all A level Mathematics students, including those without Further Mathematics A Level (or equivalent).

“At a Glance” Comparison

	STEP	AEA	MAT
Required by	University of Cambridge University of Warwick		University of Oxford Imperial College London
Encouraged by	King's College London Loughborough University University College London University of Bath University of Bristol	King's College London Loughborough University University College London University of Bath University of Bristol	
Papers	Students sit one, two or three of Paper 1 (3 hours) Paper 2 (3 hours) Paper 3 (3 hours) Depending on university requirements or level of masochism.	One 3 hour paper	One 2½ hour paper
Questions	Candidates select up to 6 questions from the 13 set on each paper. Each paper has 8 Pure Mathematics 3 Mechanics 2 Probability and Statistics questions	Candidates answer all 7 questions on the paper. All questions are Pure Mathematics.	Candidates answer 5 questions. The questions depend on the course they wish to study.
Exam timing	Summer term in year 13 (June)	Summer term in year 13 (June)	Autumn term in year 13 (Nov)
Entry deadline	Standard entry 30 th April Late entry 23 rd May	April	15 th October
Grades	S, 1, 2, 3, U	1 (Distinction), 2 (Merit), U	

Courses requiring STEP

	Course
University of Cambridge	<p>Mathematics (G100 BA/Math) Mathematics with Computer Science (G100 BA/Math) Mathematics with Physics (G100 BA/Math)</p> <p>Some colleges <i>might</i> use step for courses such as</p> <p>Computer Science (G400 BA/CS) Economics (L100 BA/Econ) Engineering (H100 MEng/E) Natural Sciences (BCF0 BA/NS)</p> <p>Detailed information can be found at www.study.cam.ac.uk/undergraduate/apply/requirements/step.html</p>
University of Warwick	<p>Mathematics (G100) Mathematics (MMATH) (G103) Mathematics and Business Studies (G1NC) Mathematics and Economics (GL11) Mathematics and Philosophy (GV15) Mathematics and Statistics (GG13) Mathematics and Statistics (inc. MMathStat) (GGC3) MMORSE (Mathematics, Operational Research, Statistics and Economics) (G0L0) MORSE (Mathematics, Operational Research, Statistics and Economics) (GLN0)</p>

Courses requiring MAT

	Course
University of Oxford	<p>G100 Mathematics GG14 Mathematics and Computer Science GV15 Mathematics and Philosophy GG13 Mathematics and Statistics G400 Computer Science IV15 Computer Science and Philosophy</p>
Imperial College London	<p>G100 Mathematics (3-year course) G103 Mathematics (4-year course) G125 Mathematics (Pure Mathematics) GG31 Mathematics, Optimisation and Statistics G104 Mathematics with a Year in Europe G1F3 Mathematics with Applied Mathematics/Mathematical Physics G102 Mathematics with Mathematical Computation G1G3 Mathematics with Statistics G1GH Mathematics with Statistics for Finance</p>

FAQs STEP

Q. How do I know if I need to take STEP?

A. If you need STEP, this will be explained in the university's offer letter.

Q. Which STEP paper(s) do I need to take?

A. The university's offer letter should make this clear but you should check with the university if you are in any doubt.

Q. What is the difference between the STEP papers?

A. Papers 1 and 2 are based on the A Level Mathematics specification. Paper 2 is harder than Paper 1.

Mathematics 3 is wider in terms of content, and is based on the A level Further Mathematics specification.

Q. Do I have to be applying for Cambridge or Warwick to take a STEP paper?

A. No. Some universities will lower their offer (eg. From A* to A in Further Mathematics) if they know that you are sitting a STEP paper. Some people even sit STEP papers because they enjoy mathematics at that level.

Q. Where can I take sit the STEP papers?

A. Typically, you sit the STEP at your school or college. If you don't attend a school or college, you will need to find a centre where you can take the test (you can do this through <http://www.admissionstestingservice.org/>).

Q. What equipment can be used for the STEP papers?

A. Candidates can take rulers, protractors and compasses into the examination. Answers should be written in hard pencil or pen.

Bilingual dictionaries can also be used by candidates who don't have English as a first language.

Calculators are **not** allowed in the examination.

FAQs AEA

Q. Do I need to take the AEA paper?

A. AEA is not used as a definite entry requirement for any university. Some universities may lower their offer slightly if they know you are sitting the AEA paper.

Q. Where can I take sit the AEA paper?

A. Typically, you sit the AEA paper at your school or college. If you don't attend a school or college, you will need to find a centre where you can take the test.

Q. What equipment can be used for the AEA paper?

A. Candidates can take rulers, protractors and compasses into the examination. Answers should be written in hard pencil or pen.

Bilingual dictionaries can also be used by candidates who don't have English as a first language.

Calculators are **not** allowed in the examination.

Q. Which is right for me, AEA or STEP?

A. Some people prefer the format of the AEA paper as it is closer to that encountered on an A level paper. STEP papers can seem more threatening when first seen. It is worth realising that, although AEA papers may look less threatening, they are still difficult! There are past papers available for both on the internet. Download a few of these and try to answer some of the questions. Gauge where your strengths lie and then use that to make your decision.