

# Importance of maths not fully understood by students

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Too many sixth form students do not have a realistic understanding of either the relevance of Mathematics and Statistics to their discipline or of the demands that will be put upon them in undergraduate study, according to a new report published today by the Higher Education Academy (HEA). The report examines the mathematical and statistical needs of students in undergraduate disciplines including Business and Management, Chemistry, Economics, Geography, Sociology and Psychology.

Professor Jeremy Hodgen, lead author of the report from the Department of Education & Professional Studies, said: 'Too few [students](#) in the UK study Mathematics after the age of 16, yet the study demonstrates that Mathematics matters across a range of subjects at university. The report recommends that prospective undergraduates are

better informed of this when applying to higher education.'

Lack of confidence and anxiety about Mathematics and Statistics is also a problem for many students, making the transition into higher education particularly challenging. A number of recommendations are made within the report to address this problem, but overall it calls for better dialogue between the sectors so that pre-university students have a better understanding of what is expected of them and the higher education sector has a better understanding of what their undergraduates can do.

The report also draws attention to developments at pre-university level, where new 'Core Maths' courses are being designed to meet the needs of the many students (the report estimates at least 200,000 a year) who need Mathematics but for whom a full A-level would not be appropriate. It calls for higher education to become actively involved in and to influence this work.

Dr Mary McAlinden, Discipline Lead for Mathematics, Statistics and Operational Research at the HEA said: 'Many students are surprised at the amount of mathematical content in their undergraduate programmes and some struggle to cope with this content.

'This project, and the accompanying reports, seeks to promote greater understanding between the [higher education](#) and pre-university sectors so that students will arrive at university better prepared and better able to cope with the mathematical and statistical demands of their undergraduate studies.'

Dr Janet De Wilde, Head of STEM at the HEA said: 'This report demonstrates the importance that the HEA places on this topic. The recommendations it contains are valuable to the sector to help further the discussion between the secondary and tertiary sector to inform policy development and teaching practice to address the importance of

mathematical and statistical skills.'

**More information:** The full report is available online:  
[www.heacademy.ac.uk/resources/... S-Transitions-report](http://www.heacademy.ac.uk/resources/...S-Transitions-report)

Provided by King's College London

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