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Recent changes in A-level mathematics: is the availability and uptake of mechanics declining yet more?

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Summary: In the past 6 years changes have occurred in GCE A-levels. In particular, there have been several major changes in A-level Mathematics courses. As engineering students are usually required to have studied A-level Mathematics, or its equivalent, these changes have had an effect on their prior mathematical knowledge. Moreover, engineering students traditionally obtained a good grounding in mechanics as part of their A-level Mathematics qualification. However, mechanics, which was once included in the core syllabus, is now optional. This article investigates the current availability and uptake of mechanics modules within A-level Mathematics courses in schools. Comparisons are drawn between these results and results of a survey of schools in 2004 and surveys of first year engineering students conducted in 2004 and 2005. It is found that there is a decline in the availability of mechanics modules and the uptake of more than one mechanics module has also decreased. The implications of these findings for engineering educators are discussed.

Classification: D34 D35 D65

Keywords: curriculum; Great Britain; mechanics; A-level mathematics; first-year students

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