

### Parallel Session 1: Presentations 1.3.1:

#### Enhancing Student Transitions into Engineering from Under represented Backgrounds

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Traditionally, women and students from deprived communities are underrepresented in engineering programmes across Scotland and elsewhere. The HEA-funded EnTICE project sought to evaluate factors affecting transitions for these target groups. In the Department of Civil and Environmental Engineering, women and students from deprived areas of Scotland make up 21% and 18% of our current undergraduate population, respectively. Both figures track above national averages. The transition factors of particular interest were recruitment, retention, and progression in the critical first two years of study.

Analyses identified that students from these backgrounds were performing as well as, if not better than, their classmates, though discrepancies remained at the highest levels of achievement. Student feedback from focus groups and anonymous surveys identified maths and engineering mechanics as the curriculum areas where further support would be most helpful. Further gaps were identified in the transition between college and university maths, which is particularly important for our mature students. These results informed a package of curriculum changes, tutorial support, peer mentoring, and faculty support for all students.

This presentation will explore lessons learned during the EnTICE project and practical measures that other institutions can pursue to support successful transitions of students from traditionally underrepresented backgrounds.