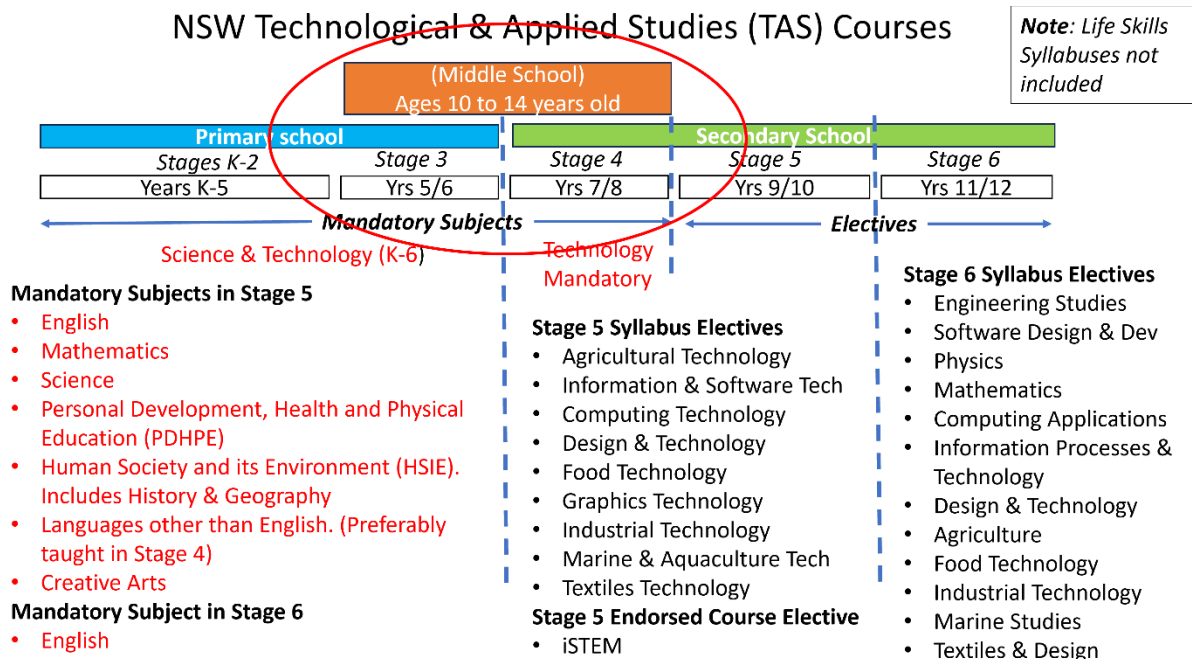


Engineering in the Vocabulary of TAS Syllabuses in NSW

Vocabulary in the Education Pipeline



Visibility of Engineering

Looking at this slide from the point of view of a parent of a young person aged between 10-14 [*The red circle on the slide*], it is easy to see how they, or their child, or their teacher, could be totally unaware of the delights and rewards of pursuing an engineering career. It is not until Stage 6 – the HSC years – that “Engineering” specifically appears in a syllabus description in NSW.

However, the content of syllabus electives and courses in earlier years contain abundant and relevant content which could – and should – be identified as engineering. This is particularly true of the Stage 5 electives Design & Technology and Industrial Technology which I would like to see re-named as Engineering and Technology, and Production Engineering respectively. Only some of the wording of the syllabus content would need to be changed. The iSTEM elective of course has Engineering in its acronym.

With this small change, “Engineering” as a discipline would then be in the vocabulary of careers teachers giving Middle School students and their parents advice on Stage 5 Electives.

Awareness of engineering in the mandatory subject years (K-6) can be achieved if the STEM acronym is properly defined; and its Engineering component explained and evangelised through school visits by STEM Advocates from engineering professions; and by teachers and STEM Coordinators who understand the role that engineering plays in STEM in Practice.