



CELEBRATING
OUR CENTENARY



ENGINEERS
AUSTRALIA

Hon. Trish White

National President and Board Chair
Engineers Australia

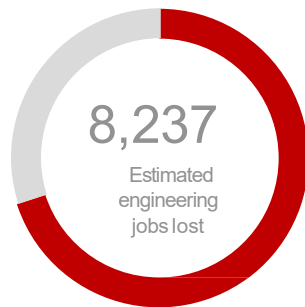
Industry 4.0: Advanced Manufacturing Forum

Melbourne Cricket Ground, 7 August 2019



Massive engineering workforce reskilling task

Australian engineering jobs – changes forecast for 2028



Automated

27% of jobs will disappear

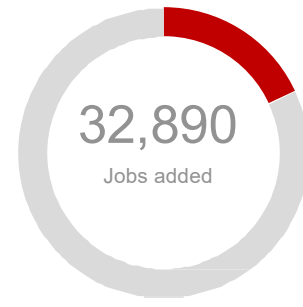
With over an estimated 14% of existing engineering jobs having 85% of human tasks replaced by technology some



Augmented

Major reskilling task ahead

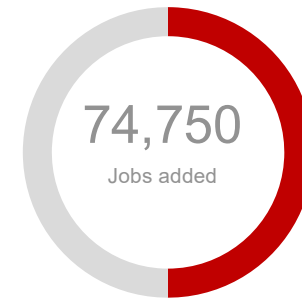
With 35% of tasks being augmented by technology, based on the industry average of 49%, a conservative estimate suggests, reskilling the existing professional engineering workforce is a major task



Created

22% that don't exist today added

Through job convergence and technology disruption



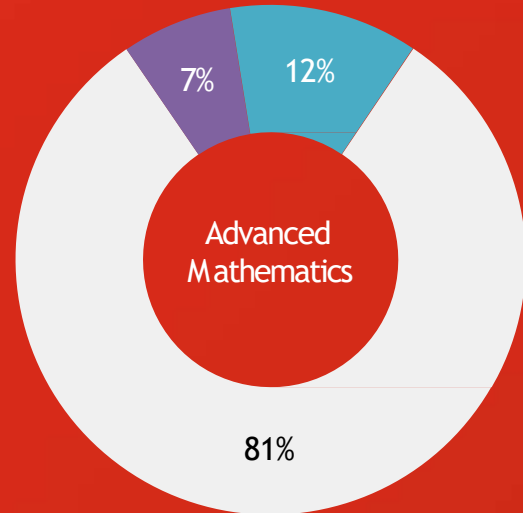
Growth

5% job growth p.a.

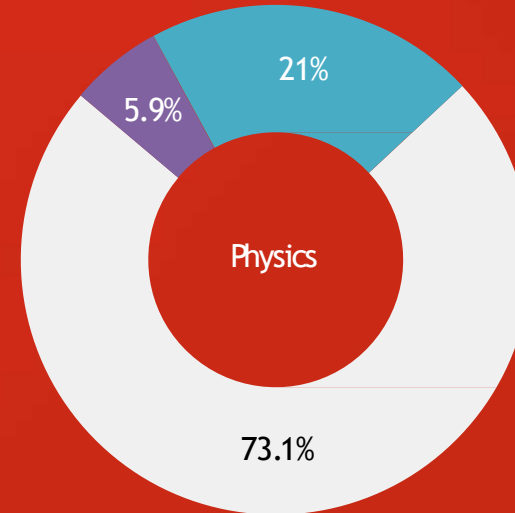
Half again as many engineering professionals will be in the Australian workforce

Sources: Australian Bureau of Statistics (ABS, August 2018) data on engineering professionals (ANZSCO 233 Professional Engineers), standard industry automation averages (Faethm, 2017). Estimates are forecast from the August 2018 total of 149,500 engineering professional employed in Australia.

Year 12 students - nationally



- Students not taking Advanced Maths
- Girls taking Advanced Maths
- Boys taking Advanced Maths



- Students not taking Physics
- Girls taking Physics
- Boys taking Physics