

The development and implementation of a graduate apprenticeship programme

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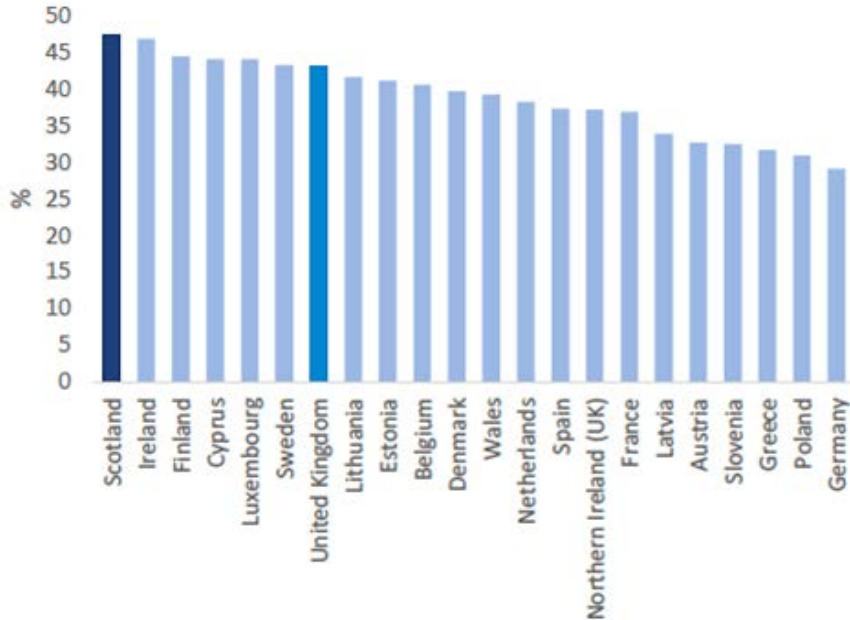
University of Strathclyde

- A socially progressive, leading international technological University located in the heart of Scotland's biggest city.
- 15,000 undergraduate and 7,000 postgraduate students.
- We're known for our excellent industry relationships – “the place of useful learning”
- We're one of the UK's top 20 research universities
- ~40 apprentices in our own employees

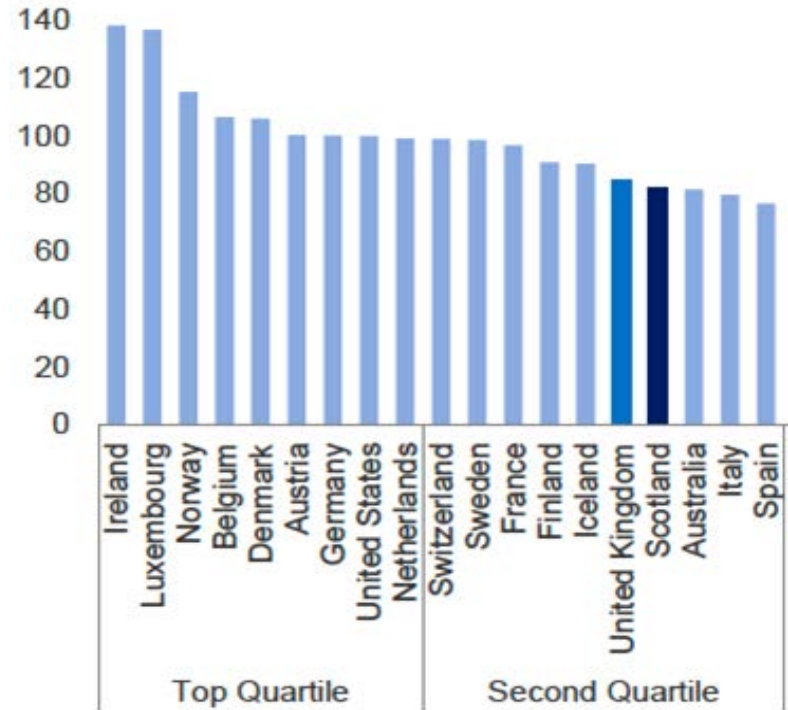


Background

Percentage of population (25-64) who are tertiary level educated, EU Countries, 2018



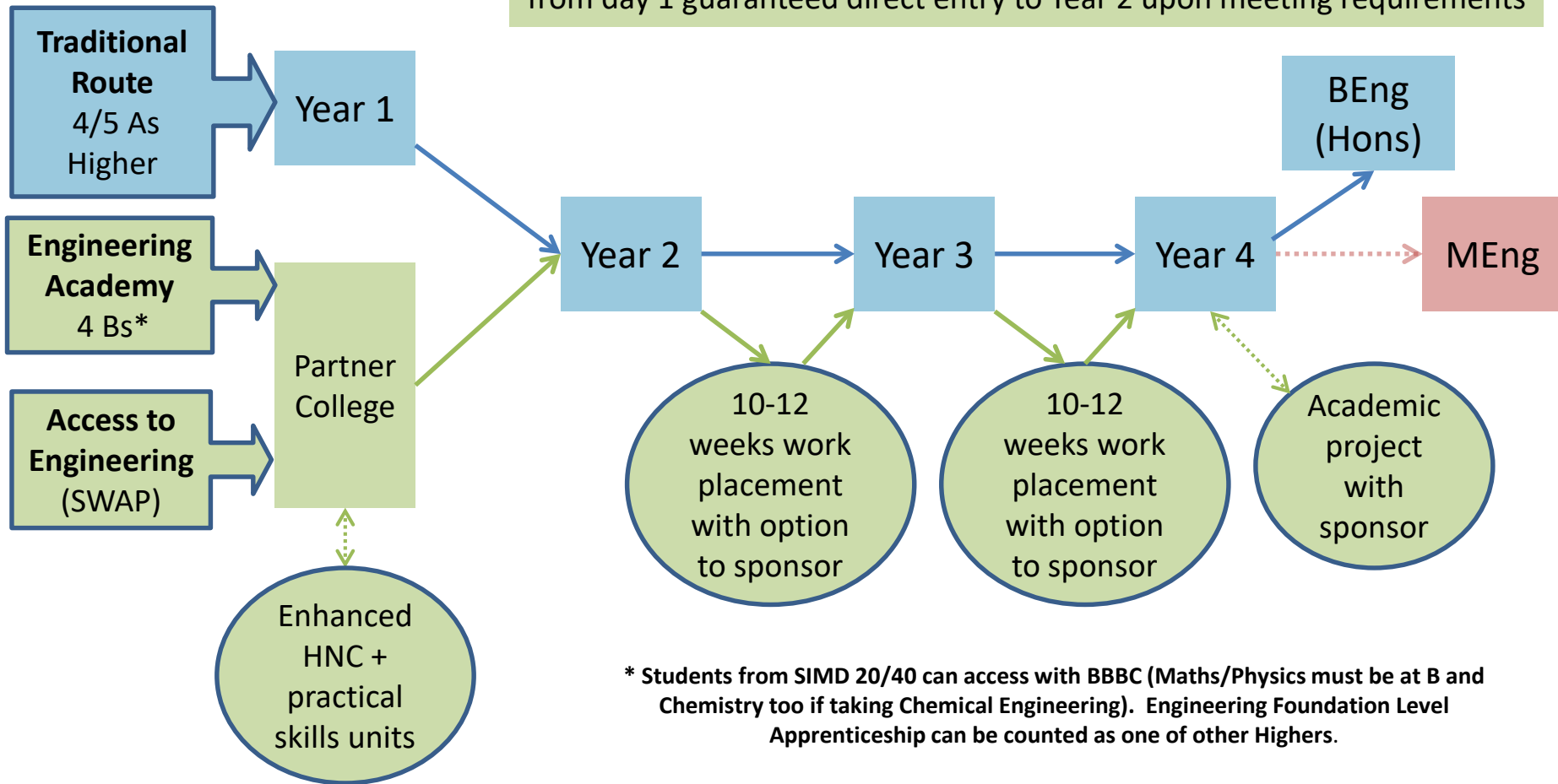
Scotland's productivity rank among OECD member countries, 2017 (GDP per hour worked USA =100)



Source: EUROSTAT (2019), [Proportion of tertiary level educated people aged 25-64 year olds](#), Apr. 2019

Source: Scottish Government (2019), [International Comparisons of Productivity](#), Feb. 2019

NB Engineering Academy students are University of Strathclyde students from day 1 guaranteed direct entry to Year 2 upon meeting requirements



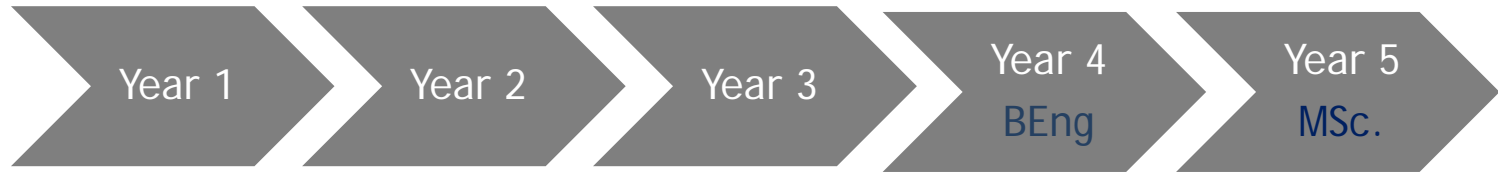
* Students from SIMD 20/40 can access with BBBC (Maths/Physics must be at B and Chemistry too if taking Chemical Engineering). Engineering Foundation Level Apprenticeship can be counted as one of other Highers.

Reported skills gaps

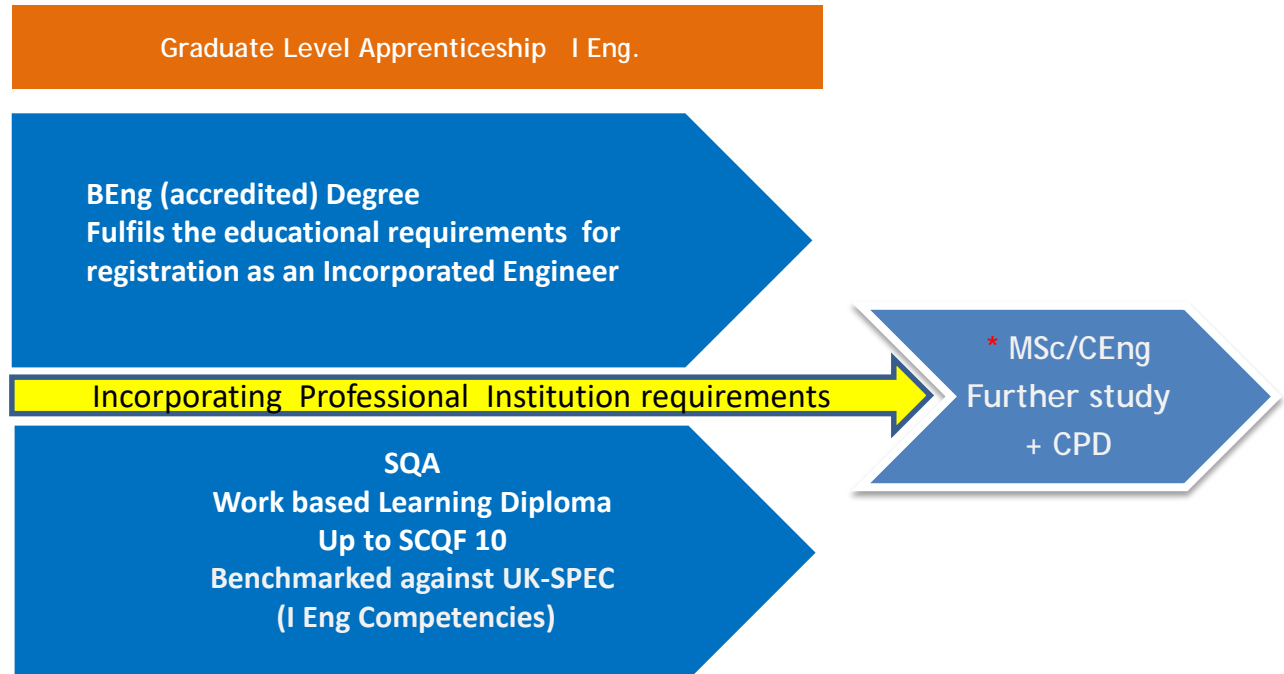
% employers stating essential for
graduate recruits

Communication skills	78%
Teamwork including leading/managing small teams	73%
Commercial awareness	69%
Behavioural skills	67%
Presentation skills (formal and informal)	65%
(Technical) Report Writing	64%
Project management	64%
Problem solving	62%
Finance skills	49%
H&S training	49%

1st Draft



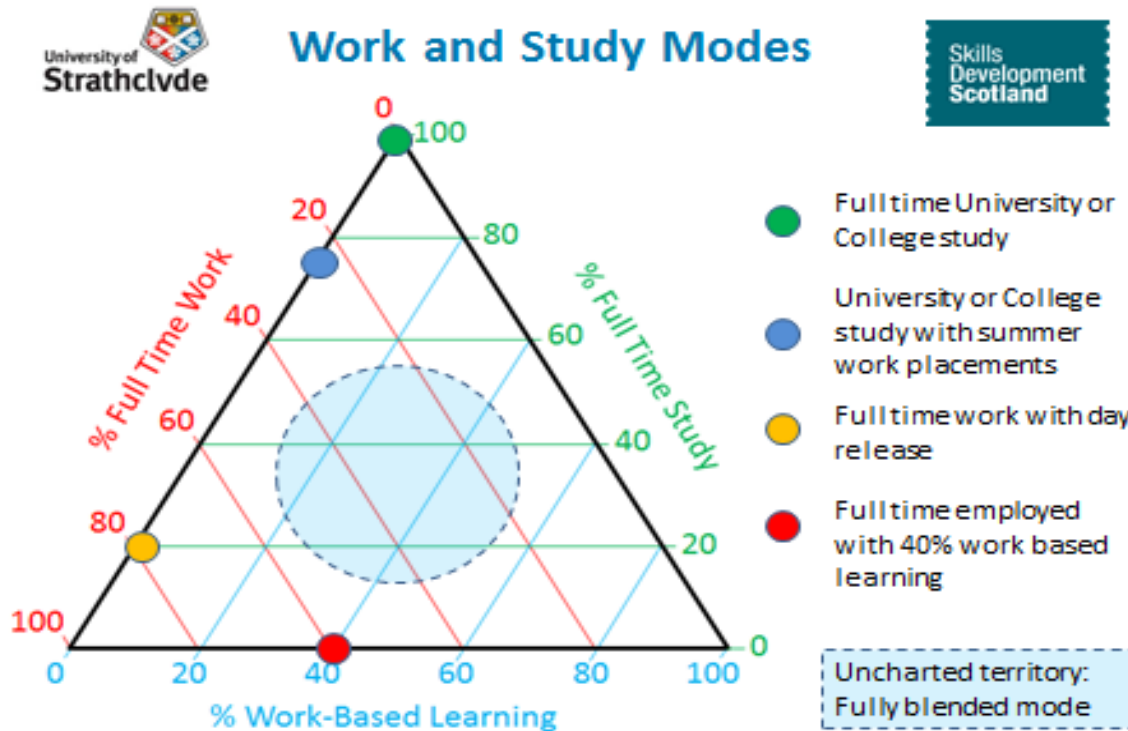
Fully Integrated



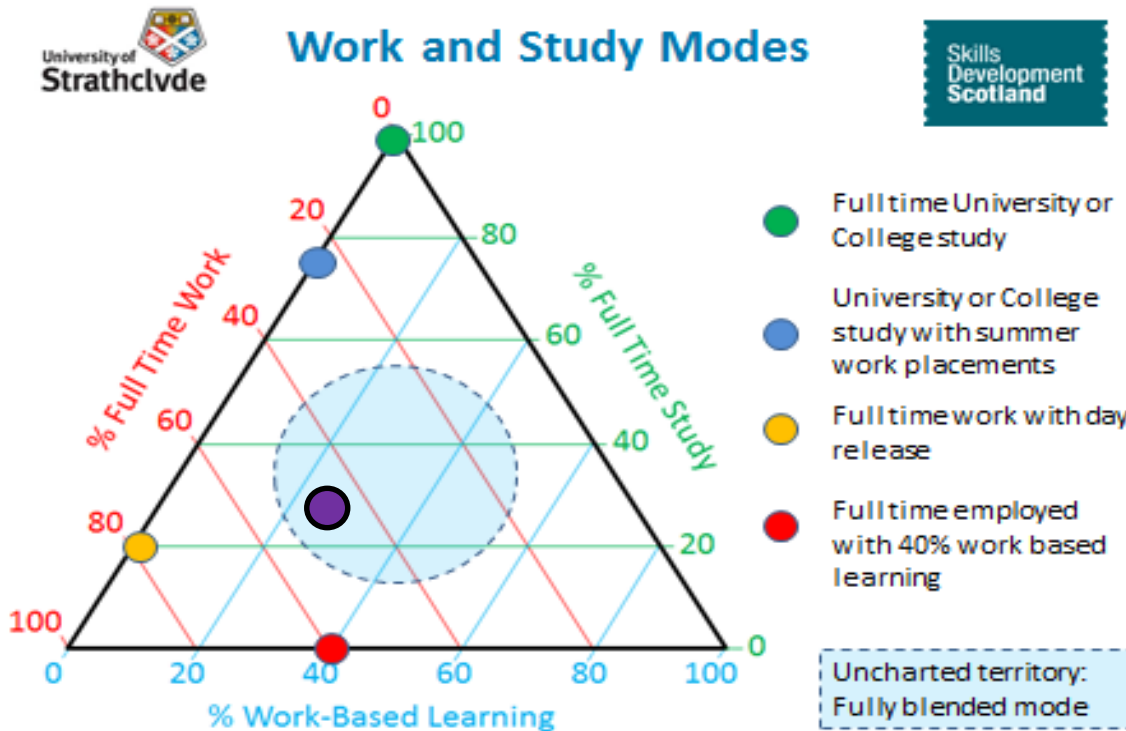
Employer and employee feedback

- Did not want a full existing degree that could be “plugged in”
- Wanted a new type of degree which was broad-based in the first two years but could specialise or remain broad-based in the second two years
- Wanted flexibility of choice over the content. They wanted to identify material within existing modules was actually relevant to their particular field
- Wanted flexibility over the delivery model
- Along with the University recognised the criticality of the vocational component and having it assessed/verified to agreed standard by a competent body or bodies
- SDS decided that the work-based learning diploma would not be a mandatory part of the national final framework. Work-based learning would be.
- All wanted the programme at this level to be completed in ~4 years

Design Philosophy

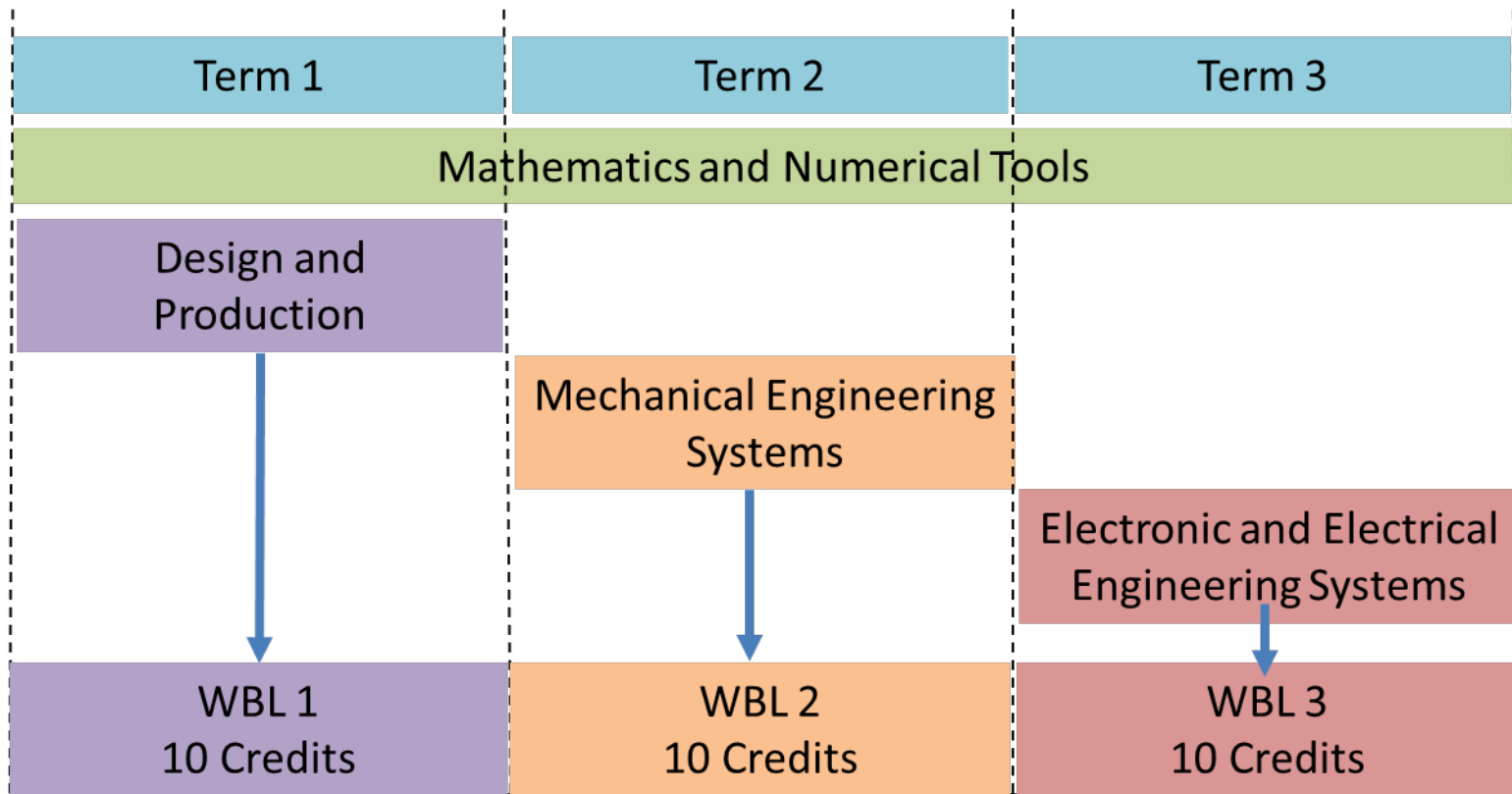


Design Philosophy



- 20% Flexible learning (distance learning of University Material)
- 20% Work-Based Learning
- 60% Full Time Work

GRADUATE APPRENTICESHIP MODEL Curriculum & Delivery



GRADUATE APPRENTICESHIP MODEL Vocational Competence

UK-Spec* competencies

Module	KNOWLEDGE		APPLICATION			MANAGEMENT				COMMUNICATION			COMMITMENT TO PROFESSIONAL SERVICES				
	A1	A2	B1	B2	B3	C1	C2	C3	C4	D1	D2	D3	E1	E2	E3	E4	E5
Design and Production 1 (Assessment 1 of 2)	A	A	A			A				A							
Design and Production 1 (Assessment 2 of 2)	A	A	A			A				A							
Mechanical Engineering Principles 1	A	A	A			A				A		A	A	A	A	A	A
Electronic & Electrical Engineering Systems 1	SP																
EO202 Design & Production 2		A		A					A	A			A	A			
EO203 Mechanical Engineering Principles 2	A	SP	SP	SP	SP					SP	A			A			
EO204 Electronic & Electrical Engineering Systems 2	P	SP	P	SP	P	SP	SP			P	A	SP		SP			

A = Awareness, SP = Supervised Practitioner, P = Practitioner, E = Expert

GRADUATE APPRENTICESHIP MODEL

Infrastructure & Support

- Work-based assessors and verifiers
- Laptops and e-portfolio
- Data analytics
- Maths diagnostic
- Networking

Outcomes

- First cohort started in September 2017
 - > 30 employees and > 15 employers
 - 97% existing employees
- Now over 100 employees over 3 cohorts
 - ~75% existing employees
- Retention rate higher than most conventional degrees
- Age and geography
- New GAs in IT, Business, and Civil Engineering

