

## 2017/18 Overview of Curriculum Projects

### Aims:

- To introduce students to new content progressively using the specialist knowledge of our employer partners
- To make theoretical learning relevant to the world of work/industry
- To deepen and extend learning to accelerate progress and understanding
- To enable students to gather evidence of participation in 'real' projects to give them the edge in the competitive jobs market

Our projects come in two formats:

- Portfolio-based Projects  
Students complete a project which links to the qualification they are studying. The project work is assessed as part of the qualification and contributes to the student's grade. The Smith & Nephew Label Machine Maintenance project is an example of a portfolio-based project.
- Curriculum-based projects  
Students complete a project which enables them to accelerate their progress through consolidating and deepening their understanding of a subject area. The project also makes learning relevant by linking it to the world of work. The Year 10 RB Gaviscon project is an example of a curriculum-based project.

Most projects take place in Years 10 and 12 to enable students to focus on preparation for exams in Years 11 and 13.

The development of projects is an on-going process. The table below contains an overview of projects that are underway this academic year.

Curriculum Area/s	Partner	Title of Project	Start Date	End Date	Year Group/s
Engineering	RB	Pilot Plant	Oct. 2017 -June 2018	Feb. 2018 - Feb 2019	Y12
Physics	Siemens Gamesa	Energy Generation	June 2018	June 2018	Y10
Chemistry	RB	Gaviscon	Jan. 2018	April 2018	Y10
Engineering	Smith & Nephew	Labelling Machine Maintenance	March 2018	July 2018	Y12
Engineering	Smith & Nephew	SMED	March 2018	July 2018	Y12
Engineering	Spencer	CAD	June 2018	July 2018	Y12
Digital Tech.	RB	Counterfeit Drugs	July 2018	July 2018	Y10 and Y12
Engineering	Spencer	Bridges	TBC	TBC	Y10
Engineering / Digital tech	Air products	Uses of computers in industry	May 2018	July 2018	Y10
Chemistry	RB	Rates of Reaction	TBC	TBC	Y10 and Y12
Physics	KCOM	Fibre Optics	TBC	TBC	Y10
Physics	Air products	Heat Exchangers EPQ	June 18	June 19	Y12
Physics	Ideal Boiler	Thermodynamic design EPQ	June 18	June 19	Y12
Physics / Engineering	Spencer / Hull University	Beam theory EPQ	June 18	June 19	Y12
Biology	Smith & Nephew	Microscopy	TBC	TBC	Y10
Engineering	Spencer / Siemens	Trains	Sept. 2018	Feb 2019	Y11
Engineering	Siemens Gamesa	Blade Part 1: Blade Design	Sept. 2018	Dec. 2018	Y12
Engineering	Spencer Group	Swing Bridge Part 1 – Bridge theory	June. 2018	Dec. 2018	Y12
Engineering	Spencer Group	Swing Bridge Part 2 CAD – Deck Design	Jan. 2019	April 2019	Y12
Engineering	Spencer Group	Swing Bridge Part 3 – Software development	May 2019	July 2019	Y12
Engineering	Siemens Gamesa	Blade Part 3: Material Science	May 2019	July 2019	Y12
Engineering	Siemens Gamesa	Blade Part 4: Manufacture	Sept. 2019	Dec. 2019	Y13
Engineering / Physics	University of hull	Labs: Tensile testing, Material properties, Beam bending & Heart pressures	June 2018	July 2018	Y12
Digital	Cisco/KCOM	Networking; Security; IOT; OS & IT; Programming; Business Digital Literacy; Packet Tracer	Ongoing	Ongoing	Y12/Y13
Digital	KCOM/Sowdens	Business Use of Social Media	March 2018	June 2018	Y12
Digital	C4Di	PixelBot	TBC	TBC	
Digital	KCOM	Managing an IT Project	Sept. 2019	Dec. 2019	Y13
Digital	KCOM	Cyber	Oct. 2017	Oct. 2017	Y10

