



# Curriculum Overview 2023-24

## DT & Engineering

Year	Topic	Week Beg.	Data Entry Deadlines	Learning Objectives	Assessments	Key Dates
YEAR 11 (Class of 2024)	Assessment - R039 Task 3 & 4	04-Sep				
	Assessment - R039 Task 3 & 4	11-Sep				
	Topic 1 Designing Processes	18-Sep				
	Topic 2 Design Requirements	25-Sep	Eve			
		02-Oct				
		09-Oct				
	Topic 3 Communicating Design Outcome	30-Oct				
	Topic 4 Evaluating Design Ideas	06-Nov				
	PPEs	13-Nov				
	Practical PPEs	20-Nov				
YEAR 10 (Class of 2025)	Week 1 Linear & Iterative Design   OnShape Intro 1.1	04-Sep				
	Week 2 User-centred & Inclusive Design   OnShape Intro 1.2	11-Sep				
	Week 3 Design Briefs and Primary/Secondary Research   OnShape Intro 1.3	18-Sep				
	Week 4 Client, Designer, Design Brief & Specification   OnShape Intro 2.1.1 Intro to Groups   OnShape Intro 2.1	25-Sep	Eve			
	Week 5 Market Research: Surveys & Focus Groups   OnShape Intro 2.2   Assessment - Scooter Project CAD Modelling	02-Oct				
		09-Oct				
	Assessment Scooter Project - Knowledge Tests 1, 2 & 3	30-Oct				
	Week 8 Brief & Specification   R039 June 2022 Starts (Not Being Submitted) Task 1	06-Nov				
	How do we make a physical prototype using modelling techniques? Travel-Clock Workshop	13-Nov				
	How do we make a physical prototype using modelling techniques? Travel-Clock Workshop	20-Nov				
Year 9 (Class of 2026)	How to freehand sketch oblique & isometric drawings styles	04-Sep				
	How to sketch using parallel lines - oblique wooden toy design.	11-Sep				
	How to freehand sketch arcs and circles.	18-Sep				
	How do we use basic CAD features for 3D modelling.	25-Sep				
	How do we use basic CAD features for 3D modelling.	02-Oct				
	How do we use basic CAD features for 3D modelling.	09-Oct				
	Assembly techniques for softwood and manufactured board.	30-Oct				
	Assembly techniques for softwood and manufactured board.	06-Nov				
	Assembly techniques for softwood and manufactured board.	13-Nov				
	Assembly techniques for softwood and manufactured board.	20-Nov				
Year 8 (Class of 2027)	How do design constraints impact on designing and manufacturing a product	04-Sep				
	How do we use the iterative process to evaluate initial design sketches	11-Sep				
	How do we apply the 6Rs to our design products	18-Sep				
	How do we apply emerging technologies to enhance the manufacturing process	25-Sep				
	How do we use scales of production in manufacturing	02-Oct				
	Evaluation, practical Marking	09-Oct				
	How do we construct buildings to profit	30-Oct				
	How do we use perspective to show 3d objects/constructions	06-Nov				
	How do we produce accurate and purposeful models	13-Nov				
	How do we use technology to overcome real world problems	20-Nov				
Year 7 (Class of 2028)	How do we measure mark and cut Pine Wood	04-Sep				
	How do we measure, mark and cut a mitre joint	11-Sep				
	How do we use a Disc Sander safely.	18-Sep				
	How do we achieve a 45% mitre joint using the Disc Sander	25-Sep				
	How do we use the Scroll Saw safely for cutting MDF	02-Oct				
	How do we achieve quality finish using sand paper.	09-Oct				
	How do we evaluate our work	30-Oct				
	What are the 6Rs and how can we incorporate recycled materials into our designs?	06-Nov				
	How do we measure, mark and cutting using textiles.	13-Nov				
	How do we use the sewing machine	20-Nov				