# Curriculum Overview 2024-25

## DT & Engineering

| Data Entry Deadlines | YEAR 11 (Class of 2024) | | Week Beg. | Data Entry Deadlines | YEAR 10 (Class of 2025) | | Week Beg. | Data Entry Deadlines | Year 9 (Class of 2026) | | Week Beg. | Data Entry Deadlines | Year 8 (Class of 2027) | | Week Beg. | Data Entry Deadlines | Year 7 (Class of 2028) | | Week Beg. | Data Entry Deadlines | |
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| | **Assessment - R039 Task 3 & 4** | R039 Communicati | 04-Sep | | Week 1 Linear & Iterative Design \| OnShape Intro 1.1 | R038 Topic 1: Design Strategies (7) | 02-Sep | | How to freehand sketch oblique & isometric drawing styles | Parallel Freehand Sketching Methods and | 02-Sep | | How do prototypes help engineers in the design process? | Solving everyday problems | 02-Sep | | How do we measure mark and cut Pine Wood | Picture Frame | 02-Sep | | |
| | **Assessment - R039 Task 3 & 4** | | 11-Sep | | Week 2 User-centred & Inclusive Design \| OnShape Intro 1.2 | | 09-Sep | | How to sketch using parallel lines - oblique wooden toy design.. | | 09-Sep | | | | 09-Sep | | | | 09-Sep | | |
| | Topic 1 Designing Processes | R038: Principles of design engineering | 18-Sep | | Week 3 Design Briefs and Primary/Secondary Research \| OnShape Intro 1.3 | | 16-Sep | | How to freehand sketch arcs and circles. | | 16-Sep | | How do we create a quality finish with acrylic? | | 16-Sep | | How do we measure, mark and cut a mitre joint | | 16-Sep | | |
| | | | 25-Sep | Eve | Week 4: Client, Designer, Design Brief & Specification \| OnShape Intro 2.1 \| Intro to Freehand Sketching | | 23-Sep | | How do we use basic CAD features for 3D modelling | | 23-Sep | | | | 23-Sep | | | | 23-Sep | | |
| | Topic 2 Design Requirements | | 02-Oct | | Week 5 Market Research: Surveys & Focus Groups \| OnShape Intro 2.2 \| | | 30-Sep | | How do we use basic CAD features for 3D modelling | | 30-Sep | | How do we use heat to change the form of our design? | | 30-Sep | | How do we use a Disc Sander safely. | | 30-Sep | | |
| | | | 09-Oct | | Assessment - Scooter Project CAD Modelling | | 07-Oct | | How do we use basic CAD features for 3D modelling | | 07-Oct | | | | 07-Oct | | | | 07-Oct | | |
| | Topic 3 Communicating Design Outco | | 30-Oct | | **Assessment Scooter Project - Knowledge Tests 1, 2, & 3** | R039 Topic 1: Design Strategies | 04-Nov | | Assembly techniques for softwood and manufactured board. | Making a pencil Box | 04-Nov | | What is a design specfication and how does it influence design ideas? | A step in time | 04-Nov | | How do we achieve a 45% mitre joint using the Disc Sander | | 04-Nov | Int Eve | Ht |
| | | | 06-Nov | | Week 8 Brief & Specification \| R039 June 2022 Starts (Not Being Submitted) Task 1 | | 11-Nov | | Assembly techniques for softwood and manufactured board. | | 11-Nov | | | | 11-Nov | | | | 11-Nov | | |
| | Topic 4 Evaluating Design Ideas | | 13-Nov | | How do we make a physical pototype using modelling techniques? Travel; Clock Workshop | | 18-Nov | | Assembly techniques for softwood and manufactured board. | | 18-Nov | | What are De-Stijl and Pop-Art Design movements? | | 18-Nov | | How do we use the Scroll Saw safely for cutting MDF | | 18-Nov | | |
| | | | 20-Nov | | How do we make a physical pototype using modelling techniques? Travel; Clock Workshop | | 25-Nov | | Assembly techniques for softwood and manufactured board. | | 25-Nov | | | | 25-Nov | | | | 25-Nov | | |
| | **PPEs** | | 27-Nov | | Week 11 Aesthetics & The Environment \| 1 \| R039 Task 1 practice | R038 Topic 2: Design Requirements (5) | 02-Dec | | Softwood finishes - oil vs. paint | | 02-Dec | PS1 | How do we use technology processes to aid the manufacturing process | | 02-Dec | | How do we achieve quality finish using sand paper. | | 02-Dec | Assesment | |
| | | | 04-Dec | | Week 12 Production (Mass, Batch, One-Off) \| \| R039 Task 2 practice | | 09-Dec | | How do we evaluate our work | | 09-Dec | | | | 09-Dec | | | | 09-Dec | | |
| | **Practical PPEs** | | 11-Dec | | Week 13 Wasting, capital, finishing & forming \| R039 Task 2 practice | | 16-Dec | PS1 | Knowledge Test. | | 16-Dec | | How do we use technology processes to aid the manufacturing process | | 16-Dec | | How do we evaluate our work (including practical marking) | | 16-Dec | | |
| | Exam Revision | | 08-Jan | PS1 | Week 14 Standards - British & International Standards - Market Pull/Push R038 **Knowledge Tests 4, 5, 6** | Topic 3: Communicating Design Outcon | 06-Jan | | How do we constrain sketches to make complex shapes? \| Deck | CAD Basics - Designing A Skateboard | 06-Jan | | How do we apply emerging technologies to enhance the manufacturing process | | 06-Jan | | How do we evaluate our work (including practical marking) | Small impacts fabric toys VS KEY RINGS | 06-Jan | | Xmas |
| | Exam Practise | | 15-Jan | Eve | Week 15 Sustainability - 6Rs - Circular Economy \| R039 Task 3 practice \| TV Remote body | | 13-Jan | | How does 'spli't and 'move face' help us model complex shapes? \| Scooter Deck | | 13-Jan | | | | 13-Jan | | DUMPY DOORSTOPS - INTRODUCTION TO BRIEF AND 3 X DESIGN IDEAS | | 13-Jan | | |
| | Comparing products & product resear | | 22-Jan | | Week 16 Types of Drawing - Oblique, Isometric R039 Task 3 practice \| TV Remote button wells and buttons | | 20-Jan | | How can we use extrude with more complex sketches? \| Skate Trucks | | 20-Jan | | How do we apply emerging technologies to enhance the manufacturing process | | 20-Jan | | DUMPY DOORSTOPS - INTRODUCTION TO BRIEF AND 3 X DESIGN IDEAS | | 20-Jan | PS1 | |
| | Product disassembly | | 29-Jan | | Week 17 Working Drawings - BS8888 - R039 Task 4 practice \| TV Remote BUttons and styling | | 27-Jan | | How can we ensure a fine finish when working with acrylic? | | 27-Jan | | | | 27-Jan | PS1 | DUMPY DOORSTOPS -SUSTAINABLE FABRICS AND FINAL DESIGN | | 27-Jan | | |
| | Virtual 3D modelling | | 05-Feb | | Week 18 - Technical Drawing Abbreviations \| R039 Task 4 practice | | 03-Feb | | How can we ensure a fine finish when working with acrylic? | | 03-Feb | | How do we evaluate our final product against the design specification? | | 03-Feb | | DUMPY DOORSTOPS -SUSTAINABLE FABRICS AND FINAL DESIGN | | 03-Feb | | |
| | Production Planning | R040 : Design, Evaluating & Modelling | 19-Feb | | Week 19 - Advantages of CAD vs. Hand-Drawn | R038 Topic 4: Evaluating Design Ideas (5) | 24-Feb | | 3D Model Your Phone Holder | | 24-Feb | PS2 | What is the ideal shape to use in constr | Awesome architecture | 24-Feb | | DUMPY DOORSTOPS -SUSTAINABLE FABRICS AND FINAL DESIGN | | 24-Feb | | Ht |
| | Producing a prototype | | 26-Feb | | Week 20 - Methods of evaluating a design idea | | 03-Mar | | How do we create a Design Proposal? | | 03-Mar | | | | 03-Mar | | DUMPY DOORSTOPS -SUSTAINABLE FABRICS AND FINAL DESIGN | | 03-Mar | | |
| | Evaluating a prototype | | 04-Mar | | Week 21 - Methods of Evaluation - Ranking Matrices & QFD | | 10-Mar | PS2 | What are the design implications of 'building beneath the ocean'? | | 10-Mar | Eve | How are buildings designs to withstand storms and earthquakes? | | 10-Mar | | PAPER TEMPLATES, BONDAWEB AND CUTTING OUT | | 10-Mar | | |
| | **Assessment - R040 Task 1** | | 11-Mar | | TV Remote Marking & Feedback \| Section A Revision | | 17-Mar | | Assessment - Using CAD to design a home beneath the sea | | 17-Mar | | | | 17-Mar | | PAPER TEMPLATES, BONDAWEB AND CUTTING OUT | | 17-Mar | | |
| | **Assessment - R040 Task 2** | | 18-Mar | | Section B Revision | | 24-Mar | Eve | Assessment - Using CAD to design a home beneath the sea | | 24-Mar | | How do architects use perspsective to create realistic building designs? | | 24-Mar | | BONDAWEB AND SEWING MACHINE | | 24-Mar | | |
| | **Assessment - R040 Task 3** | | 25-Mar | PS2 | **Assessment - R038 Past Paper** | | 31-Mar | | How do we evaluate our work | | 31-Mar | | | | 31-Mar | | | | 31-Mar | | |
| | **Assessment - R040 Task 4** | | 15-Apr | | Week 1 - Techniques for Freehand Sketching in 2D | R039 Communicating Design | 21-Apr | | Week 1 - Techniques for Freehand Sketching in 2D | R039 - Communicating Ideas | 21-Apr | | How do designers/engineers communic | | 21-Apr | PS2 | HAND SEWING - SLIP STITCHING TOP | Key rings plastics | 21-Apr | | Easter |
| | **Assessment - R040 Task 5** | | 22-Apr | | Week 2 - Techniques for Sketching in Oblique & Isor | | 28-Apr | | Week 2 - Techniques for Sketching in Oblique & Isometric | | 28-Apr | | | | 28-Apr | | | | 28-Apr | | |
| | **Assessment - R040 Task 6** | | 29-Apr | | Week 4 - Techniques for Rendering freehand sketch | | 05-May | | Week 4 - Techniques for Rendering freehand sketches | | 05-May | | How to use models to communicate design ideas? | | 05-May | | HAND SEWING - SLIP STITCHING TOP | | 05-May | | |
| | Coursework Sign-off | | 06-May | | Week 5 - Annotation & Labelling Techniques | | 12-May | | Week 5 - Annotation & Labelling Techniques | | 12-May | | | | 12-May | Eve | | | 12-May | | |
| | **GCSE Exams** | | 13-May | | Week 7 - How to produce orthographic drawings u | | 19-May | | Week 7 - How to produce orthographic drawings using freehand techniques | | 19-May | | How to use models to communicate design ideas? | | 19-May | | ASSESSMENT THEORY AND PRACTICAL | | 19-May | Assessment | |
| | | | 20-May | | Week 10 - Understanding the centreline | | 26-May | | Week 10 - Understanding the centreline | | 26-May | | | | 26-May | | | | 26-May | | |
| | **GCSE Exams** | | 03-Jun | | Assessment - R039 Task 1 | | 02-Jun | | Week - 1 Analysing the design brief | Making a desk tidy | 02-Jun | EoY Wk | What are aerodynamics? | 3-2-1 Blast Off! | 02-Jun | EoY Wk | DESIGNING KEYRINGS, Techniques for marking and cutting curves | | 02-Jun | | Ht |
| | | | 10-Jun | | Assessment - R039 Task 1 | | 09-Jun | | Week 2 - Creating intital design ideas | | 09-Jun | | | | 09-Jun | | | | 09-Jun | | |
| | | | 17-Jun | | Assessment - R039 Task 2 | | 16-Jun | | Week 3 - Developing a design idea | | 16-Jun | | What is the iterative design process? | | 16-Jun | | How do we drill acrylic with the pillar drill | | 16-Jun | PS2 | |
| | | | 24-Jun | | Assessment - R039 Task 2 | | 23-Jun | | Week 4 - Producing a CAD model | | 23-Jun | PS3 | | | 23-Jun | PS3 | | | 23-Jun | Eve | |
| | | | 01-Jul | | Assessment - R039 Task 3 & 4 | | 30-Jun | | Week 5 - A plan of manufacture | | 30-Jun | | How does the iterative design process help to improve designs? | | 30-Jun | | Assessment - Keyring Assembly - Pillar Drill Safety | | 30-Jun | | |
| | | | 08-Jul | | Assessment - R039 Task 3 & 4 | | 07-Jul | PS3 | Week 6 - Making the desk tidy | | 07-Jul | | | | 07-Jul | | | | 07-Jul | | |
| | | | 15-Jul | | | | 14-Jul | | Week 7 - Making the desk tidy | | 14-Jul | | How to evaluate our design outcomes? | | 14-Jul | | Assessment - Keyring Assembly - Pillar Drill Safety | | 14-Jul | | |
| | | | 22-Jul | | CEW Week | | 21-Jul | | CEW Week | | 21-Jul | | CEW Week | | 21-Jul | | CEW Week | | 21-Jul | | |