**The Latimer Arts College Curriculum Year Overview**

**Subject: Design Technology (DT)**

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|  | **Year 7** | **Year 8** | **Year 9** | **Year 10** | **Year 11** | **Year 12** |
| **Term 1** | *DT is delivered in a rotation. All students will study 8 week blocks of the following*  Textiles (Emoiji Keyring)  Learning basic textile and sewing techniques by hand and machine to produce a keyring.  Graphics Skills (Perspective)  Rendering in different materials  1 and 2 Point perspective Technical Drawings  DT & CAD 1  (Acrylic pocket game)  Introduction to 2D design software & laser cutter  and general CAD skills  DT & CAD 2  (MDF hobby box)  Joining techniques, Laser cut Acrylic embellishment and painted finishing techniques | *DT is delivered in a rotation. All students will study 8 week blocks of the following*  Textiles (Drawstring Bag)  Learning fabric decoration techniques and more advanced hand and machine skills to manufacture a bag.  Graphics (Book Cover and Phone Stand)  Experience in CAD software 2d Design and Adobe Illustrator  Design a book cover and make an acrylic/vinyl phone holder  DT (Pandora’s Box)  MDF and Acrylic  Pewter casting  2D CAD design skills | AUTOMATA: Design/ Develop /WS skills MDF, Acrylic Paints, Safety  THEORY: Core Principles  MATERIALS: Plastics, Timber, Metals, Paper and Boards | CADCAM/DESIGN SKILLS  Onshape/2D Design  THEORY: Specialist Principles  MATERIALS: Plastics, Timber, Metals, Paper and Boards | NEA: Initial ideas /modelling / research /evaluation  RELEVANT THEORY: Specialist Principles 3 | TECHNICAL PRINCIPLES: Materials & Applications -  Wood, Metal, Paper, polymer, composite, smart. |
| **Term 2** | AUTOMATA: Making skills/ Finishing skills  THEORY: Core Principles  MATERIALS: Plastics, Timber, Metals, Paper and Boards | CAD/CAM DESIGN SKILLS:  Onshape/2D Design  THEORY: Specialist Principles  MATERIALS: Revision and Quizzes | NEA: Development/cad  RELEVANT THEORY: Specialist Principles 3 | TECHNICAL PRINCIPLES: Performance characteristics/Enhancement of materials, Forming & Distribution, Finishes. |
| **Term 3** | COINSAFE: Designing within constraints. MDF Ply Acrylic. Designing and modelling card.  THEORY: Core Principles  MATERIALS: Plastics, Timber, Metals, Paper and Boards | NEA MOCK: Research/ Task analysis. Responding to theme/ target market /brief /spec/initial ideas  THEORY: Specialist Principles 2 3  MATERIALS: Timber Specialism | NEA: Development /modelling / manufacturing/ testing/ user  RELEVANT THEORY: Specialist Principles 3 | TECHNICAL PRINCIPLES: Modern scales of production, Digital Design and Manufacture, Product development & Health & Safety. |
| **Term 4** | COINSAFE: Making, finishing in the style of De Stijl. Varnishing.  THEORY: Specialist Principles 2 | NEA MOCK: Initial /ideas /development / modelling  THEORY: Specialist Principles 3  MATERIALS: Timber Specialism Exam Style tests | NEA: Manufacture/ evaluation  RELEVANT THEORY: Specialist Principles 3 | TECHNICAL PRINCIPLES:  Design for manufacturing, Feasibility studies, Enterprise, Design communication. |
| **Term 5** | GADGET TIDY: Using card for modelling, MDF, foam board  THEORY: Specialist Principles 2 | NEA MOCK: Manufacturing/  Evaluation  THEORY: Specialist Principles 3  MATERIALS Exam style tests | THEORY REVISION | DESIGNING & MAKING PRINCIPLES:  Design methods, Design theory, Technology and cultural change. |
| **Term 6** | GADGET TIDY: Using card for modelling, MDF, foam board  THEORY: Specialist Principles 2 | NEA: Task exploration / Research/ Brief /Spec  RELEVANT THEORY: Specialist Principles 3 | THEORY REVISION  & EXAMINATION | DESIGNING & MAKING PRINCIPLES:  Design processes, critical analysis, selecting tools & processes, accuracy in design |