

ADT (Design Technology) Curriculum Intent, Implementation and Impact Overview

<p style="text-align: center;">INTENT</p> <p>(including key concepts and skills)</p>	<p style="text-align: center;">Unit 3 - Skills based activity - Unit 3 Constructing the Built Environment</p> <p>Context: Students will undertake a series of practical skills that will inform the processes for materials, materials and their characteristics and also methods of manufacture, this will range from Joinery, electrical and brick laying projects that teach the core skills and the following assessment objectives</p> <p>3.1 Interpreting technical sources of information 3.2 Planning and organising work 3.3 Identifying resource requirements 3.4 Calculating the materials required 3.5 Writing and setting success criteria 3.6 Prepare for construction tasks 3.7 Carrying out techniques 3.8 Removing and disposing of materials 3.9 Working practices that promote health and safety 3.10 Evaluating construction tasks</p> <p>Key Vocabulary: Lap joint, Finger Joint, Screw joint, Dowel Joint, Butt joint, Mortise and Tenon joint pillar drill, laser, CAD/CAM, Chisel, Mallett, Marking Knife, Tri Square, first fix, second fix, cement mixer, ratio, live, neutral, earth, multi core, single core</p> <p>Cultural Capital: Applications of lap joints in traditional furniture making and the pros and cons of working with pine and plywood. Understand finishes for timber, introduction of different weathers and climate change.</p>	<p style="text-align: center;">Unit 1 Theory- Introduction to the Built Environment</p> <p>Context: This unit provides an introduction to the built environment with particular focus on: • identifying and describing ideas and concepts in the built environment • explaining concepts in the built environment • evaluating evidence, ideas and concepts in the built environment • comparing and contrasting ideas, concepts in, and evidence related to, the built environment.</p> <p>1.1 The sector 1.2 The built environment life cycle 1.3 Types of buildings and structures Designing the Built Environment 1.4 Technologies and materials New 1.5 Building structures and forms Designing the Built Environment 1.6 Sustainable construction methods Planning the Built Environment</p> <p>Taught in Yr11 1.7 Trades, employment and careers Constructing the Built Environment 1.8 Health and safety</p> <p>Key Vocabulary: Responsibilities, Legislation, Concepts, Evaluation, Designing, Employment, Careers, Technologies, Sector, Sustainability, Health and safety</p> <p>Cultural Capital: Traditional printing techniques and their application in the textiles industry. How the approach to Health and safety has changed and adapted overtime for the protection of employees.</p>
<p>Health and safety awareness</p>	<p>Knowledge of H&S in the workshop. Starters and plenaries for H&S linking to all aspects of the workshop environment and beyond.</p>	<p>Explicit teaching of H&S legislation, theory, then applying this to an examination context.</p>
<p>Implementation of health and safety knowledge</p>	<p>Application of H&S knowledge in the practical setting whilst making a 4 joint frame, basic apron on with manufacture, wearing goggles when working on machines and with chisels.</p>	<p>Applied through previous and future practical assessments.</p>
<p>Work safely with hand tools and materials.</p>	<p>Joint work in construction, use of Tenon Saw, Bench Hook, Marking Knife, Marking gauge, Tri square. Electrical work in construction - Pliers, wire strippers, Stanley knife, screwdriver, cutting mat</p>	<p>Explicit teaching of H&S legislation, theory.</p>

	Brick work in Construction - Trowel, pointing tool, brush, mallet, spirit level	
Work safely with machine tools.	Belt sander, Mortise Machine, Pillar Drill, cement mixer	Explicit teaching of H&S legislation, theory etc.
Working independently	Ability to construct all aspects of the projects accurately, working from a precise drawing and within the allowed tolerances	Exam assessments and metacognition strategies/techniques.
Develop skills in visual presentation.	Clear presentation of joinery write up, live document to be filled in at the end of each practical session and photographic documentation, student centred.	
Responding to a brief.	<ul style="list-style-type: none"> in construction projects the sequencing is linked to the specification, the design brief and the drawings. sequencing is time-framed and needs to meet building regulations and health and safety requirements. sequencing of work needs to consider the essential stages of any activity undertaken. This includes having the right tools, equipment and personal protective equipment (PPE) as well as the correct materials to complete the activity. a well-designed sequence of work will create a logical and efficient flow of work which takes account of the time taken to complete specific tasks and when one task is dependent on another being completed first. 	
Demonstrate understanding of social, historical, cultural and moral factors in design.	is developed by the project designer/design team in consultation with the client • outlines the deliverables and the scope of the project including any products or works, the timeline and budget	Understanding of H&S law and the ways and settings they are applied too.
Skills and use of finishing techniques	Wood finishing -cutting, sanding, staining/painting,first fix fitting, wiring, brick laying, pointing, tidying to work within the allowed tolerances.	
Generating success criteria for objective self-evaluation.	Evaluation of work through the joinery write up. Informal evaluation as work progresses.	
IMPACT	Assessment: Baseline assessment of joinery skills from box project. Practical assessment -GNVQ assessment criteria Written assessment - Evidence portfolio, all write ups to be aimed at Distinction level	Assessment: Trial written assessments. QLA of trial exams and R2R in response to this. Tests will be done at the end of each section to establish gaps and misconceptions.

Cultural Capital is the body of knowledge a student needs so that they can flourish in the future and not be left behind. LTM = Long Term Memory.