

Careers /Training Apprenticeship

Architect
Architectural technician
Building control officer
Building surveyor
Civil engineer
Civil engineering technician
Construction manager
Estimator
Mechanical services engineer
Project manager
Quantity surveyor
Structural engineer

Bricklayer
Ceiling fixer
Construction plant operator
Demolition operative
Dryliner
Electrician
Gas mains layer
Glazier
Joiner or carpenter
Painter and decorator
Plasterer
Plumber
Road worker
Roofer
Scaffolder
Shopfitter
Stonemason
Tiler
Window fitter

Land and property valuer
Land surveyor
Landscape architect
Minerals surveyor
Planning and development surveyor
Property developer
Town planner

ROAD MAP TO CONSTRUCTION

THE DESIGN & TECHNOLOGY CURRICULUM

After school intervention sessions available

UNIT 3 PRACTICAL

EVALUATION

Evaluate success
Criteria

REVISION UNIT 1

Exam preparation
Revision
Maths and science
Practice papers



UNIT 3 PRACTICAL

TECHNIQUES and PROCESSES

Apply techniques
Carpentry
Electrical
Decorating
Apply Health and safety

UNIT 3 – PLANNING

Processes – Planning, construction
Maintenance
Calculate resources
Sequence process – SUB / SUPER
Allocate Time to processes
Set tolerances



UNIT - 3 PRACTICAL

RESOURCES

Identify resources needed
PPE, Tools, Materials
Calculate materials needed
Set success criteria
Prepare for construction

UNIT 1 - PLANNING

Roles in construction
Responsibilities
Activities
Types of project

UNIT 3 - PRACTICAL

WORK PLAN

Interpret the brief
Interpret technical drawings
Plan sequence of work

YEAR 11

MOCK EXAM

UNIT 1 – SAFETY

LEGISLATION – RESPONSIBILITIES
HASWA, RIDDOR, COSHH, PUWER
MHOR, PPER, WAHR, ASBESTOS
SIGNAGE – Colour, Shape, Meaning
Placement
FIRE EXTINGUISHERS – Colour Use
HSE - Role, powers

UNIT 3 – FPT CARPENTRY

Technical drawings
Quality control
Basic Skills into
Tools and Equipment
Health and safety

UNIT 1 - SAFETY



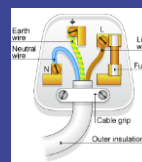
HAZARDS – Identify, Effects – Who, Where, What
SUB / SUPER STRUCTURE
RISKS likelihood, severity
CONTROL MEASURES - application
In different situations
Equipment, scale

UNIT 3 - FPT CARPENTRY

WOOD JOINTS - Lap, Tenon, Mitre
, Housing
Finger, Dowel, Cross halving, Tee halving
Corner Housing
Health and Safety

UNIT 1 - SAFETY

SECURITY
Identify risks
Control measure
On Site
Off Site



Complete a FPT to install
a light switch and plug
to a mounted fixing
Requisition correct
materials
Evaluate outcome
against success criteria

Processes
Earth, Live, Neutral
Connector blocks
Light switches, lamps
Plugs

UNIT 3 – FPT ELECTRICAL

Tools and Equipment
Health and Safety
Materials
Electrical Wiring diagram



UNIT 3 – FPT DECORATING

Work plan
Identify resources
Cost Job

SPECIALISM
Resistant
Materials
Electronics

CORE SKILLS: WOOD/METAL/ELECTRONICS/BASIC CIRCUIT

Students will work to a brief to design and make a simple electronic skill based game. They will be introduced to basic circuitry including a battery and buzzer to be utilised in their design and complete an information sheet relating to the components required to construct their circuit showing full understanding of how a circuit works. Pupils will manufacture their design using workshop and electronic skills and understanding

YEAR 10

HOMEWORK
RESEARCH REGIONALITY
EVALUATION

CORE SKILLS: ADAPTING RECIPES/UNDERSTAND DIETARY REQUIREMENTS

Students are introduced to a wider variety of kitchen equipment. They learn how to adapt a recipe to remove a particular allergen or dietary requirement and are encouraged to experiment with their own recipes

SPECIALISM
Food

VEGAN

CORE SKILLS: DESIGN AND COMMUNICATION/ SPECIFIC USERS/CAM

This DMA introduces students to paper and board, designing for specific product and client, primary and secondary research and understanding symbols, typography and colour while identifying appropriate ways to communicate with target audience. It aims to further develop design and modelling skills by producing a range of 2D and 3D models, to help develop and test their products for form and function. Students then plan their final product and manufacture their product being able to select and use the appropriate materials and equipment for their design. Students accurately manufacture their product using CAD CAM

HOMEWORK
PACKAGING AND TARGET MARKET
SURFACE DEVELOPMENT AND SYMBOLS
PAPER AND BOARD LAYOUT

SPECIALISM
Paper/Board
Graphics
CAD/CAM

YEAR 9

SPECIALISM
Resistant
Materials

CORE SKILLS: WOOD/ USING TOOLS/ISOMETRIC DRAWING

Students design and make their own trinket box using pine and MDF. They look at Art Deco style and are introduced to specialist tools, machinery and joints. Through their research and designing they will understand about the properties of the woods they are using and how it is prepared to commercial use, as well being introduced to the basic principles of isometric drawing

HOMEWORK
PRODUCT ANALYSIS
DESIGN IDEAS
ART DECO RESEARCH
ANNOTATED DESIGN

HOMEWORK
PLASTIC /POLYMERS
COPY WRITE
SUSTAINABILITY
CAM

SPECIALISM
Plastic
Graphics
CAM

CORE SKILLS: CAD /CAM SUSTAINABILITY

Students complete a DMA based on Polymers and CAM linked to the theme of Sustainability. This unit aims to introduce students to a range of materials, Sustainability, Iterative modelling and CAM specialist techniques and equipment. Students continue to develop their research skills to produce a range of 2D models to help develop, test and refine their ideas and enable them to select appropriate materials for their product. The final product is developed on CAD software and manufactured using a CAM laser cutter

At least 5 days

CORE SKILLS: USING RECIPES AND SPECIALIST EQUIPMENT/EVALUATION

Students expand their knowledge of how to prepare healthy and varied meals. In addition to following recipes they will also use the Eatwell Plate to design their own healthy meals

HOMEWORK
BALANCED MEAL
EVALUATION

SPECIALISM
Food

YEAR 8

CORE SKILLS: ACRYLIC/DESIGNING/HEALTH AND SAFETY

Students use a design brief to highlight use, fitness for purpose, costing and materials. They are introduced to vacuum forming techniques and form acrylic sheeting into shape required. They work with accuracy and within Health and Safety guidelines to complete final product

SPECIALISM
Resistant
Materials

HOMEWORK
HEALTH AND SAFETY
RESEARCH
DRAWING SKILLS
REPORT

HOMEWORK
HEALTH, HYGIENE AND
SAFETY
EVALUATION

CORE SKILLS USING RECIPES AND SPECIALIST EQUIPMENT/EVALUATION

Students learn to follow a simple recipe and prepare a dish. They are taught to evaluate their work in regards to taste, texture and smell, students learn about the source and seasonality of the ingredients used

SPECIALISM
Food

HOMEWORK
CUSTOMER PROFILE
MATERIALS CAD
TIMBER TOOLS AND
EQUIPMENT

SPECIALISM
Graphics
Resistant
Materials
CAD

CORE SKILLS: TIMBER/GRAPHICS

Students complete a DMA based on Timber properties, workshop H+S, Tools and Equipment for cutting and shaping, stock forms, marking out, accuracy, quality control and selecting and applying material finishes. The design element covers introduction to a brief, designing from own research, designing for clients, rendering, annotation, understanding technical drawings, British standards and tolerance. There is also a CAD element of the course where students develop their ideas using specialist CAD Graphic software

YEAR 7

Take part in
Transition day
activities at AHS