

TECHNOLOGY KS3



Secrets wooden box

How do I use hand tools and machines to manufacture a plywood box?

How do I apply Computer-Aided Design (CAD) and Computer-Aided Manufacture (CAM) skills to my product?

TECHNOLOGY IN ACTION VISIT TO CECAMM



Design and manufacture of model pond yacht

What hand and machine tools are required to identify the characteristics of a stable yacht?

Maritime project: CECAMM centre of excellence to support the design and implementation of infusion techniques.



Computer-Aided Design/Computer-Aided manufacture

How can different manufacturing techniques support the design and manufacturer of an acrylic keyring through the use CAD and CAM?



Cross-stitch and maritime windsocks

How can I use designing and focused skills to produce a small-scale hand sewn item?

Which type of stitch would be required for different fabrics?

Can I develop a symbol and use analytical skills to review the symbol designs of others?

Which methods do I need to use in order to produce a symmetrical design and windsock product?

YR7



Healthy eating

Why is the 'Eat Well Plate', used as a guide to food preparation and nutrition?

How can I use different techniques to produce a range of well-made and healthy food products?

REGATTA

YR8



Mechanical toy

Which CAMs and levers would suit different purposes?

How can you use MDF and plywood to produce an automata?

When would it be appropriate to use hand tools and machinery to support the production of a product?



Fleece soft toy

How can I design and manufacture a fleece soft toy? Which hand embellishment, surface decoration and pattern cutting techniques can be used to improve my product?

How do I operate a sewing machine safely?

Gutter boat

Which design and manufacture techniques can be used, alongside hand tools and machines, to produce a gutter boat?

How can I use evaluation techniques to assess power and buoyancy?



Maritime project: CECAMM centre of excellence to support hull design and metalwork techniques



Practical cooking, baking and nutrition

How can I use a hob and oven to produce a range of individual cooked and baked products?

How can I combine ingredients to produce food products with an understanding of nutrition?



Graphics packaging and design for manufacture

How can I use ICT to produce a range of logo designs for a small enterprise, manufacturing a vacuum formed soap mould?

YR9

TECHNOLOGY IN ACTION VISIT TO CECAMM

REGATTA



Passive amplifier

How do I research, design and manufacture a passive amplifier for a client? Which do I explore a given context and work professionally with a client?

How do I develop my understanding and techniques of hand tools and machines to produce a high quality product?



Maritime project: How do I complete and investigation and research into boat hull design, cargo and stability?

Which performance, time and cost constraints are essential to production? What material and size constraints would be barriers to successful production? How do I prepare for models to be tested?



Micro:bit

How can I use an enterprise project to produce a programmed design with direct outputs by developing my programming skills?

What are the most effective ways of producing a manufactured casing to house the programmable device?

How do I create an e-portfolio to record the learning journey?



Electronic device bean bag

How do I produce and manufacture a 'device bean bag' using the skills of pattern cutting, development and assembly?



Heat processes and ingredient reactions

What range of techniques and processes are required to produce more complex dishes and food products?

What are the effects of combining foods and the outcomes when doing so?

KS4