Domain Knowledge and Skills Years 11

Year 11	**Food**	**Fabric**	**Metal**	**Wood**	**Electronics/Wood**
Measuring	Weighing and measuring ingredients correctly: Scales Measuring jugs Measuring spoons	Body measurements in relation to Commercial Pattern sizing Measuring to agreed tolerances Selecting and using marking out tools accurately	Marking out materials for further processing Measuring to agreed tolerances. Selecting and using marking out tools safely	Use of face marks / edge marks. Measuring to agreed tolerances. Selecting and using marking out tools safely	Ohms Law. Use of a multimeter to measure values. Ability to measure resistance, capacitance, voltage, current.
Safe and correct use of tools/equipment	Ability to use equipment correctly - *electric equipment* - *hobs/ovens* - *knives/utensils* - *cooking equipment*	Appropriate selection of tools/equipment *Use of cutting, shaping and joining tools and equipment* *Layout and Cutting techniques*	Use equipment/ tools correctly and safely. *Cutting and shaping hand tools. Portable electric tools and machines (as per Technology workshop safety document).*	Use equipment/ tools correctly and safely. *Cutting and shaping hand tools. Portable electric tools and machines (as per Technology workshop safety document).*	Ability to use electronic hand tools. *Use of correct soldering techniques.* *Use of a P.C.B. Tank to produce a circuit board*

Materials Selection	Understand the functions of ingredients to give desired: -*appearance* -*aroma* -*texture* -*flavour/taste* Understand the nutritional qualities of food Understand the effects of processing on food (within class context) Understand the requirements for labelling and packaging Understand effects of advertising and marketing	Selection through understanding of form, function and aesthetics of a limited range of fabrics (usually woven) Testing for durability and laundering and selection justified	Understand properties of materials used. Evaluate material suitability for application. Understand and justify material selection based on their functional and aesthetic qualities, availability and cost.	Understand difference between manufactured boards and timber and their appropriate use. Evaluate some materials suitable for application Understand and justify material selection based on their functional and aesthetic qualities, availability and cost.	Identify component symbols. Understand the function of components and how they are categorised, eg. electrolytic, ceramic. Identify the values of components eg. resistors and capacitors, IC's. Select the appropriate component from a suppliers catalogue. Cost out the unit price of components. Identify components into Inputs, Processes and Outputs. The Picaxe microcontroller function and application. The Transistor and its function and use.
Techniques	Food preparation, cooking, presentation,	Fashion Drawing using a template Body	Cutting materials to agreed tolerances	Select and use as appropriate jointing methods*; Butt, housing,*	Use of Breadboards to model and test. Modelling of circuits and PCB layouts, e.g.

	storage Food testing Sensory testing – *Ranking* *Hedonic scale,* *Triangle testing* *Evaluation* *Nutritional Analysis*	Measurements (*Bust, Waist and Hips*) Pattern adaptation based on a commercial pattern *Trialling* *Disposal of Fullness* *Seams* *Pockets* *Fasteners* *Neck Finishes* *Sleeves* *Waist Finishes* *Hems*	Joining materials to agreed tolerances Folding/ bending. materials to agreed tolerances Know advantages / disadvantages of jointing methods Assembling product components	*mitre, lap, dowel.* Working to agreed tolerances. Know advantages / disadvantages of jointing methods. Assembling product components	crocodile clips and eagle. Techniques to packaging electronics, e.g. Jointing, mounting of circuit boards. Vacuum Forming mould making. Vacuum forming process.
Finishing/Presentation	Presentation of food on a plate Garnishing Labelling and packaging a food product for target market	Application of Design Principles Quality Control measures to produce quality outcomes throughout construction	Preparing materials for finishing. Applying finishing techniques to meet final design specs. Correct and safe application of the chosen finishing methods.	Preparing materials for finishing. Apply chosen finishing method e.g. *Lacquer*, *Staining, Polishing, Oils,Painting* Correct and safe application of the chosen finishing methods.	Material finishing for casing and packaging.

Codes of Practice	Storage, preparation, cooking, reheating of food safely Safe personal hygiene practices Safe and hygienic practice in the foods room HACCP Quality control Labelling and packaging standards	Copyright Law Consumer Guarantees Act	Copyright Law Safety in the workshop and processing/finishing to a given standard	Accountability regarding Copyright Law Consumer Guarantees Act	
Commercial practice	Understands simple commercial processes and techniques used to manufacture simple products	Understands simple commercial processes and techniques used to manufacture simple products	Understands simple commercial processes and techniques (e.g. templates, jigs) used to manufacture products	Understands commercial processes and techniques (e.g. C.A.D, templates, jigs) used to manufacture products	Understands simple commercial processes and techniques (e.g. production of circuit boards, assembly of circuit boards) used to manufacture products
Historical and future trends (national and global)		Individuals may explore historical and future trends linked to their practice.			