Generic Unit Year 13

Teaching Sequence	Learning Intentions	Criteria for Evaluation	Assessment Strategy
Introduction to Year 13 and expectations ▪ NCEA overview including opportunities for scholarship and how Year 13 steps up from Year 12. ▪ Presentation of evidence-expectations ▪ Year 13 technology-pathways ▪ Technology cycle and the use of clients ▪ Assessment policies/procedures/formative/summative ▪ Timelines-unit overview/programme/deadlines.	*Students understand:* ▪ How achievement/unit standards (*teacher to insert*)will be used to assess them in technology, importance of timelines and deadlines, assessment procedures and expectations of homework and extra work out of class. ▪ How scholarship works.	*Students meet deadlines over the course duration.* *Consequences of not meeting deadlines.*	Ongoing teacher/student` interaction-feedback
▪ Establishing Clients and issues related to client relationships ▪ Anticipation of costs/budgets ▪ Teacher communicates with clients	*Students understand:* The importance of establishing genuine clients and the need to be able to communicate with them regularly.	*Students identify a client*	
Introduction to possible context(s) and client issues associated with the contexts ▪ Class brainstorms possible issues ▪ Individual students identify a possible client and eventually an issue. ▪ Exploration of issue and the location in which the issue resides ▪ Identify possible key and wider community stakeholders ▪ Teacher confirms suitability of client	*Students can:* ▪ Identify client issue ▪ Identify those who have an interest in the issue ▪ research the main implications of the environment/location ▪ how the stakeholders and environment will influence a developing solution	*Students research and identify the problem to be resolved.* *Students ensure that selected issue is rigorous enough to allow students to provide evidence for the selected achievement standards* *Key and wider stakeholders have an interest in the issue and are prepared to give constructive feedback.*	Student explains choice of client and potential issue to the teacher
Skill development: Project Management ▪ Reflect on past planning practices and evaluate for usefulness ▪ Develop project management strategies.	*Students understand that:* ▪ Planning is an important aspect of managing a project and is a dynamic process. ▪ There are consequences when planned stages are not met on time.	*Students:* ▪ *Identify milestone stages and develop timelines – incorporates all milestones to meet given deadline* ▪ *Student planning clearly communicates next steps and why.*	Gantt chart or other selected project management tools

Practising Technologists (either two technologists or two outcomes from one technologists) ▪ Preparation for industry visits. ▪ Industry visits and or speakers and/or case studies. Document key steps in practice and the knowledge that underpins the practice and why.	*Students can:* ▪ Students interact with technologist. ▪ Recognise/analyse key steps in technologist practice	*Students:* ▪ *Develop questions* ▪ *Record answers* *Analyze/Synthesize information. (inclusion/exclusion into students own practice)*	Student submits report and any visual evidence. AS 90686
▪ Start to identify initial key factors (all important considerations that are identified as a result of research to date) in order to establish a need(s). ▪ Conceptual statement	*Students can* develop an conceptual statement that reflects client and wider stakeholder(s) needs/desires and location constraints	*Students initial brief* ▪ *addresses stakeholder needs/desires/ constraints/legislation and location needs.*	Initial Brief
Knowledge and skill development ▪ Discuss means of researching and communicating conceptual ideas: e.g internet search, magazines, existing solutions, drawings, quick models, notes. ▪ Sourcing relevant information ▪ Students conduct own research and produces concepts for discussion with client and stakeholders. ▪ Refine brief and specifications	Students can: ▪ Select means of researching and recording ideas and justifies decision. ▪ Communicate idea to client/stakeholders. ▪ Reflect on findings to refine brief and establish some specifications	▪ *Students' conceptual ideas are informed by research.* ▪ *Conceptual ideas are presented to the client/stakeholder in a way that clearly communicates the idea.* ▪ *Interactions are recorded and key decisions justified.* ▪ *Findings from own practice and stakeholder are reflected in the developing brief.*	Student/teacher conferencing.
Knowledge and Skill Development ▪ Students are introduced to a range of knowledge and skills which are context specific at this level.	Students develop a 'bank' of appropriate skills for the material(s) they are likely to use	*Students:* *Trial and record a range of techniques.*	Teacher discusses results with student.
Knowledge development Codes of Practices and ethical considerations for product development. This includes: material marking out, cutting and joining methods; modelling methods; properties of commonly used materials including their limitations and possibilities; use of tools and machinery when manufacturing products.	▪ Students know the relevant codes of practice for product development ▪ Recognise the codes of practice used by practicing technologists	*Students:* *Understand the codes of practice That are important to their own practice.*	Relevant codes of practice have been considered.

Skill Development: Demonstrate how modelling techniques are used to test ideas. ▪ Concept development including: ▪ ongoing planning and brief refinement, ▪ knowledge development and materials properties and uses. ▪ Sketching to communicate ideas ▪ The importance of regular communication with client and wider stakeholders.	Students can: ▪ Test and trial key ideas for inclusion/exclusion ▪ Plan for each step including resources ▪ Develop brief as decisions are made ▪ Justify key decisions as in material choice ▪ Seek appropriate feedback from client/stakeholders	*Students:* *record key steps in developing their prototype in order to communicate with stakeholders and gain feedback*	Model, Photographs and or sketches show development process and the developing brief reflects the key decisions made
▪ Gives examples of finalised/ prioritised key factors ▪ Provides opportunity for ongoing refinement of brief and development of conceptual design into a final design informed by planning. ▪ Production of working drawings. ▪ Final Brief and Specifications	*Students can:* Prioritise and Justify key factors Use planning to inform the development of their final design	*Students use:* *On going project management to inform design development* *Working drawing is a true representation of product to be manufactured.*	Planning documentation Working drawing checked for accuracy
▪ Model of Concept or One Off solution-assembly.	*Students can:* Assemble and tests to demonstrate their design features potential or actual fitness for purpose (to client and wider stakeholders.)	*Students* *demonstrate potential and fitness for purpose.*	submits Conceptual Design or One Off solution and written justifications
▪ Confirmed Final Brief and Specifications			Final Brief and Specification
• Conceptual Design or One off solution Evaluation (in situ) with client and in intended location. • Discuss 'future viability' of the conceptual design or the one off solution	Students can demonstrate that their outcome is fit for purpose with its intended location	*AS 90613, 90620, 90686, 90687* *See assessment schedule* *Students can develop an outcome and the final evaluation shows that it is fit for purpose.*	Test evidence and evaluation of outcome being used in situ, including client feedback.