 Technology Mandatory Years 7-8

The new Technology Mandatory Syllabus Years 7-8 was released in 2017 for implementation for Year 7 in 2019. The new syllabus replaces the previous Technology (mandatory) syllabus and includes content from the Australian Curriculum Technologies. The new syllabus has significant changes to the previous version including changes in the structure and new mandatory content.

The Technology Mandatory syllabus has a strong focus on design and production with the majority of time to be spent on practical experiences. A minimum of four projects must be completed in Stage 4.

Content is arranged into four contexts:

* Agriculture and Food technologies,
* Digital Technologies,
* Engineered Systems and
* Materials technologies.

There are ten outcomes in the syllabus. Six of these outcomes refer to specific technologies within each context. This is different to the previous syllabus where the outcomes could be addressed in every project.

All four contexts must be delivered in Stage 4 and each is mapped to up to five or six of the ten outcomes. Contexts can be taught concurrently and repeated as required. The Digital Technologies content must be delivered for a minimum of 50 indicative hours.

The table below shows the mapping of outcomes to contexts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Code | Outcome | Ag and food | Digital | Engineer | Materials |
| TE4-1DP | designs, communicates and evaluates innovative ideas and creative solutions to authentic problems or opportunities | 🗸 | 🗸 | 🗸 | 🗸 |
| TE4-2DP | plans and manages the production of designed solutions | 🗸 | 🗸 | 🗸 | 🗸 |
| TE4-3DP | selects and safely applies a broad range of tools, materials and processes in the production of quality projects | 🗸 |  | 🗸 | 🗸 |
| TE4-4DP | designs algorithms for digital solutions and implements them in a general-purpose programming language |  | 🗸 |  |  |
| TE4-5AG | investigates how food and fibre are produced in managed environments | 🗸 |  |  |  |
| TE4-6FO | explains how the characteristics and properties of food determine preparation techniques for healthy eating | 🗸 |  |  |  |
| TE4-7DI | explains how data is represented in digital systems and transmitted in networks |  | 🗸 |  |  |
| TE4-8EN | explains how force, motion and energy are used in engineered systems |  |  | 🗸 |  |
| TE4-9MA | investigates how the characteristics and properties of tools, materials and processes affect their use in designed solutions |  |  |  | 🗸 |
| TE4-10TS  | explains how people in technology related professions contribute to society now and into the future | 🗸 | 🗸 | 🗸 | 🗸 |

Agriculture and Food technologies

The Agriculture and Food Technologies context requires all students to develop knowledge and understanding of food and fibre production and the selection and preparation of food for healthy eating. Students are required to produce an agricultural product and/or a food product.

Digital Technologies

This context must be taught either individually and/or concurrently with other contexts for 50 hours of the course. There are two outcomes related specifically to digital technologies. These are focussed on coding and the sourcing, use, application and communication of data. In stage 4, students must develop skills in using a text based programming language. Students will need access to equipment such as computer laboratories and hardware to achieve these outcomes. It should be noted that digital technologies is about the development of digital solutions and not the use of software. Applications such as office tools, Computer Aided Design and manufacture (CAD/CAM) and multimedia do not satisfy the requirements for digital technologies.

Engineered Systems

This context is intended to develop student’s understanding of force, motion and energy through their application in a project. Students develop design and produce models, prototypes and products to demonstrate these principles in a practical application.

Materials Technologies

The Materials technologies context can be adapted to include any technologies relevant or of interest to students. I can include projects in textiles, multimedia, web design, timber, metal, plastics, electronics, leatherwork or any other technology that allows the students to address the content.