Tranche 1A Course Overview

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Proposed Course	Course Description	Rationale
Science Level 1 *Personal futures*	*Science* Level 1 enables learners to be in control of their understanding of our shared world and prepare them for their possible futures. *Science* Level 1 will harness learners' curiosity, wonder and interest in the biology, Earth and space science, physics and chemistry. They will follow and extend their own interests to investigate, imagine and explore ideas by inquiring into what is around them in their local community.. Learners will be guided in a variety of rich and meaningful inquiry-based experiences when learning. Through a flexible and open-ended approach, they will revisit and reflect on their ideas, extending their thinking to take on further challenges.	*Science* Level 1provides a rational and empirical way of answering interesting and important questions about the biological, physical and technological world. The knowledge it produces has proved to be a reliable basis for action in our personal, social and broader lives. *Science* Level 1 completes a continuum of science courses from Preliminary to Level 1 to Level 4 and allows all learners to continue mandatory Science from Year 10, the *Preliminary Science* course. Currently over 50% of jobs in Tasmania benefit from a science background (calculated from: https://economy.id.com.au/tasmania/employment-by-industry) – and this will only increase. *Science* Level 1 will: • prepare learners for employment opportunities that require foundational scientific knowledge and skills • enable equity of access to Science to all learners, ensuring that learners can include science as part of their pathway within Senior Secondary education, no matter what their background • provide a flexible course for those not on a university pathway and where their pathway is not easily defined within one area of science • provide explicit articulation of the General Capabilities, with learner choice embedded, thereby increasing student agency • allow learners to negotiate areas of focus where they can gain the greatest benefit from their learning and for their possible future pathways. All learners should have the opportunity within their compulsory education to engage or reengage with all learning areas, including science. It has been identified locally (https://stem.education.tas.gov.au/), nationally (https://www.education.gov.au/review-achieve-educational-excellence-australian-schools) and internationally (https://en.unesco.org/unesco_science_report) that greater STEM understanding, in this case science, benefits learners, the workforce and the broader community.
Civics and Citizenship Level 1 *Discipline-based study*	*Civics and Citizenship* Level 1 is about participating in Australia's democratic system and local and global communities. *Civics and Citizenship* Level 1 includes four main topics. These are: Australia's democratic system, Australia and the world, citizenship, and belonging and diversity. Learners will experience a strong focus on applied learning and 'opportunities and obligations'. These themes show how the learning will have an impact on learners and their communities into the future. **Additional context for providers** This course replaces the current *Community Access* Level 1 (CAC110117).	As a Years 9 to 12 Education course, *Civics and Citizenship* Level 1 enables learners to reach their potential, in particular it provides opportunities for developing Personal Empowerment, Cultural Transmission and Preparation for Citizenship. The course is intended to provide Level 1 access to a number of HASS suites of learning, including those in Legal Studies and the proposed suites in Global Futures and Human Behaviour . *Civics and Citizenship* Level 1 is designed to consolidate the knowledge, understanding, skills and confidence required to participate fully in Australia's democratic system of government, to engage fully in their own communities, and to work collaboratively and respectfully with others in the pursuit of shared goals. A further focus of the course is to develop the confidence, judgement, responsibility and civic engagement of learners; and to enhance these personal qualities through student agency in the selection of personal and group interest projects of applied work in each of the three modules.

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Enterprise at Work Level 2 *Work-based learning*	*Enterprise at Work* Level 2 is a practical course that connects learners to existing or new enterprises as they learn what it means to be an enterprising person. They will discover their enterprising strengths, develop targeted transferrable enterprise skills and gain insight into future job clusters, including options for self-employment. Students will take active roles, as part of a team, in one or more enterprise projects related to events, products, services or social enterprises. This will prepare them to undertake an individual or collaborative enterprise project related to their interests and ideas. Learners will develop the creativity, problem-solving and collaboration skills that are critical to founding new enterprises and for individuals to work in, work for and work with these enterprises.	*Enterprise at Work* engages learners by activating their confidence, creativity and capability to reach their potential and lead productive and fulfilling lives. According to The Foundation for Young Australians (FYA) New Work Order research (FYA, 2018)[1], enterprise skills are transferable employability skills that enable young people to engage with a complex world and navigate the challenges they will inherit. Enterprise skills are not just for entrepreneurs, they are skills that are required in many jobs. The terms used to describe these skills vary across different contexts: sometimes called generic, soft, or 21st century skills. The nature of work is rapidly changing. Enterprising mindset and entrepreneurial behaviours have been identified as important transferrable characteristics that have been found to be powerful predictors of long-term job success. Research has identified that there is a strong correlation between family background and enterprise skills (Education Development Trust, UK, 2020)[2]. *Enterprise at Work* Level 2 provides a way for all learners to develop an enterprising mindset and entrepreneurial behaviours, embedded in digital ways of working, which will support them to be confident and creative individuals, able to adapt to their circumstances and be successful. [1] https://www.fya.org.au/wp-content/uploads/2017/07/NWO_ReportSeriesSummary-1.pdf [2] https://www.educationdevelopmenttrust.com/our-research-and-insights/research/youth-transitions-creating-pathways-to-success
Engineering Design Level 2 *Professional studies*	*Engineering Design* Level 2 enables learners to be creative problem solvers who explore how and why things work. Learners will be supported to work individually and collaboratively with others to explore the activity of engineers through practical problem-solving using engineering design processes. *Engineering Design* Level 2 incorporates concepts from Maths, Science and subjects such as Design and Technology, Computing and Construction, within project-based learning to enable learners to solve problems and to design and improve things. Learners will have opportunities to shape their learning experience through their interests, questions they want to explore and products they choose to create in response to authentic challenges. **Additional context for providers** This course replaces the current *Engineering Design* Level 2 (EDN215118).	Technologies enrich and impact on the lives of people and societies globally. The practical nature of the Technologies learning area engages students in critical and creative thinking, including understanding interrelationships in systems when solving complex problems. (ACARA, 2021). The *Engineering Design* suite provides a flexible framework for learners to engage with engineering principles and systems through integrated Science, Technologies, Engineering and Mathematics (STEM) inquiry. Engineering is a broad term covering a wide range of skills and diverse disciplines but fundamentally, engineering is about improving people's lives through engineered solutions. The *Engineering Design* suite encourages students to become aware of factors that influence innovation and enterprise, and the subsequent success or failure of a product. Learners will develop a specific skill set that will enable them to confidently explore a challenge or identify an existing problem and develop a solution in an engineering context. This will be achieved through an engineering design process and learners will gain valuable experience, not only in designing engineered components but also in project management. Learners will learn to generate imaginative and creative solutions of their own. They will communicate their ideas within the parameters and requirements of engineering-based tasks whilst gaining and applying knowledge of industry standards of design, manufacture, and safety. Through practical experiences, learners will learn to use technology to design, test and appraise products, systems and solutions and identify and articulate further improvements and developments.

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Transdisciplinary Science Level 2 *Transdisciplinary projects*	*Transdisciplinary Science* Level 2 provides an opportunity to inquire deeply into an area of scientific interest within Tasmania. Learners will apply inquiry-based approaches to design, plan, and undertake investigations across scientific disciplines, responding to local or global situations. Learners will experience and gain expertise in inquiry processes and how knowledge is created. By coming to an evidence-based understanding through the applied observation and thinking skills in this course learners are prepared for any pathway in 21st century. **Additional context for providers** The Transdisciplinary Science course is intended to be used for projects within provider set parameters/foci, for example: Marine and Southern Ocean (Antarctic) studies, Renewable Energy or Earth and Space. It may also be used for individual student transdisciplinary projects.	Science provides a rational and empirical way of answering interesting and important questions about the biological, physical and technological world. The knowledge it produces has proved to be a reliable basis for action in our personal, social and broader lives. Innovative and critical thinking in the world of science underpins a cohesive understanding of the natural world and the discovery of new ways of doing and thinking. Science is continually refining and expanding knowledge and stimulating new questions for future investigation. As part of a suite of two proposed flexible science components *Transdisciplinary Science* Level 2 provides a powerful platform for learners to develop their capabilities, in particular, to think creatively, work collaboratively, and be innovative and to prepare for Level 3 science courses. In practice, most modern and applied science flows between scientific disciplines and is transdisciplinary by nature. Learners undertaking *Transdisciplinary Science* Level 2 will apply inquiry-based approaches to design, plan, and undertake investigations across scientific disciplines on a short term or more extended scale, responding to local or global situations. Both collaboratively and individually, learners will employ a scientific approach to collecting, representing, and analysing data, and using technological tools effectively. After evaluating their procedures or models, learners communicate scientifically to draw evidence-based conclusions that may lead to further testing, exploring more effective methods or solutions, or raising new questions. They will be equipped to navigate, understand and adapt to what we experience as 21st century learners.