



Graduate Diploma in Design and Technologies Education

Study while you teach. Expand your expertise. Access regional workshops.

RRR Delivery Hubs

Tamworth, Orange, Yass

Duration 12 months full-time

Fees

Commonwealth supported places available. For up-to-date fee information, visit acu.edu.au/fees

Contact

fea.partnerships@acu.edu.au acu.edu.au/askacu

Learn more and apply

For the latest information about this course, scan the code below. acu.edu.au/course/gddte



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Disclaimer (September 2024): Information correct at time of printing. The university reserves the right to amend, cancel or otherwise modify the content without notice. This course is designed for teachers in regional NSW who wish to upskill and become a technologies Lead Teacher.

The RRR Delivery Hubs bring practical workshop training to rural NSW. Hosted by partner schools in Tamworth, Orange and Yass, workshops are completed as school holiday intensives, allowing teachers to upskill without taking time off work. In just one year, you can re-train as a technologies Lead Teacher.

OVERVIEW

Broaden your skills and specialist knowledge in emerging design and technology practice through the Graduate Diploma in Design and Technologies Education at ACU.

Learn how to transfer expertise in the principles of design and key engineering technologies to empower students to become critical users of technologies and designers and producers of designed solutions for sustainable futures.

Graduates who successfully complete this course will be able to apply for recognition as a teacher in the following subject areas: design and technologies, industrial technology (timber) and industrial technology (engineering), in addition to their current teaching areas.

This flexible course allows for all units to be delivered online, with the practical components undertaken at your local RRR Delivery Hub.

Students will explore units in:

- timber design
- product design
- electromechanical and engineering technologies
- design and technologies curriculum, pedagogy and assessment

Our RRR Delivery Hubs offer fully equipped timber, metal and mechatronics workshops, giving students access to traditional tools and equipment alongside opportunities to develop skills in computer aided design and manufacturing.

You may be eligible for the Teach and Learn Scholarship (High Demand Subject Areas). For further information, visit the NSW Department of Education website.

ELIGIBILITY

You must comply with the ACU Admission to Coursework Programs Policy.

To be eligible for admission to the course, you must have completed one of the following prerequisites:

- bachelor's degree in education
- or
- bachelor's degree and a recognised teaching qualification.

COURSE STRUCTURE

To graduate from this course, you must complete 80 credit points (cp) of design and technologies units from the Schedule of Unit Offerings outlined in the course handbook.

You can expect 150 hours of study in total per unit.

Units are run in professional terms which match the NSW school calendar, with workshops delivered during NSW school holidays.



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UNIT DESCRIPTIONS

Design Principles

This unit introduces students to the design environment in technologies and provides an opportunity to develop knowledge, skills and understanding which will support ongoing learning in the technologies sequence. Students will learn to identify, select, evaluate and apply design principles.

Design in Timber 1

In this unit students will develop knowledge and skills in timber design and associated materials and digital technologies. Students will learn to identify, select and evaluate principles, properties and performance characteristics of timber materials and their suitability for design applications.

Design in Timber 2

In this unit students will extend their knowledge and skills in timber design and the associated materials and digital technologies that are used. Students will refine their skills to identify, select and evaluate principles, properties and performance characteristics of timber materials and their suitability for design applications.

Product Design

This unit develops students' knowledge of the ways in which past, current and emerging technologies influence, and have influenced, principles and processes of product design and production. Through examples and case studies, students will explore design and manufacturing techniques suitable for timber, metal and plastics including CAD/CAM technologies and will develop designed products.

Electromechanical Technologies

In this unit students will develop knowledge of the design and manufacture of electromechanical systems, including electronics and principles of mechanical engineering, and demonstrate appropriate safe use of electronics in design. Practical skills will be developed through the design and manufacture of electronically controlled products using a range of techniques and industrial materials including CAD/CAM technologies.

Engineering Technologies

In this unit students will develop subject content knowledge and skills in engineering, electronics, electromechanical technologies, control systems, programming, design and manufacture, and how these can be applied in various contexts. These key engineering aspects will be studied in past, present and emerging contexts, and the role of modern engineering on global sustainability, society, ethics and the environment will be evaluated through review of examples and case studies.

Design and Technologies Curriculum, Pedagogy and Assessment 1

In this unit students will develop their pedagogical content knowledge through

becoming familiar with the knowledge, understanding and skills necessary for teaching design and technologies at a junior secondary level.

Design and Technologies Curriculum, Pedagogy and Assessment 2

In this unit students will consider the place of design and technologies education in contemporary Australian society, and the senior secondary design and technologies curriculum in particular. They will explore a range of evidence-based approaches for curriculum development and alignment and plan for effective teaching and learning, including formative and summative assessment.

FURTHER STUDY

Graduate Diploma in Design and Technologies Education provides a pathway for further study in higher degree programs at a postgraduate level, including the Master of Education and Master of Educational Leadership.

RRR Delivery Hubs, bringing TAS teacher training to rural NSW

