



Microcredentials – Lifelong Learning @ UNSW Canberra

Fundamentals of Mission Engineering

Why Fundamentals of Mission Engineering?

Fundamentals of Mission Engineering is a microcredential tailored for individuals eager to delve into mission engineering, providing a solid foundation for those without prior exposure to mission engineering, systems engineering, and complex system theory. Participants will gain foundational skills in interpreting mission engineering concepts, terminology, and system architecture principles. This foundational content provides participants with the required knowledge for further exploration and application in mission engineering.

This course can be taken as a standalone microcredential or as a stepping stone, paving the way for the development of intermediate skills in mission engineering in the UNSW stackables portfolio.



Your course experts include:



Assoc.Prof. Sondoss Elawah
Director - Capability Systems
Centre, UNSW Canberra

Sondoss Elawah is an Associate Professor of Systems and Computing, and the Director of the Capability Systems Centre at University of New South Wales. Sondoss leads the systems engineering discipline at UNSW Canberra. Her research program focuses on understanding the behaviour of large complex problems and systemic risks that arise from the interactions between social, technological, and environmental systems. She is an expert on the application of systems methodologies to support design, decision making and education.



Dr Kumudu Amarawardhana
Lecturer – Capability Systems
Centre, UNSW Canberra

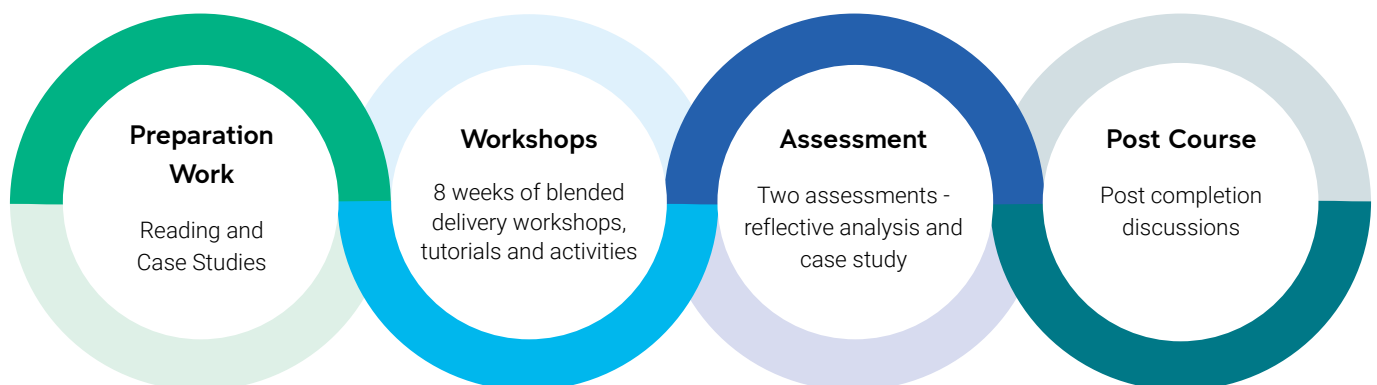
Kumudu Amarawardhana is a lecturer at the Capability Systems Centre at UNSW Canberra, specialising in microgrid systems and integrating renewable energy resources. She obtained her doctorate degree from the University of Tasmania and has served as a university lecturer for about five years, making significant contributions to STEM education in regional areas of Australia. She also holds an MSc in sustainable energy engineering, a certificate in sustainability and economics from Sweden, and a BSc in mechanical engineering (Honours) from Sri Lanka.



Travis Hunt
Industrial Specialist – Capability
Systems Centre, UNSW Canberra

Travis Hunt is an industry specialist at the Capability Systems Centre at UNSW Canberra. Travis is an experienced system engineering and program management professional, having experience within Defence and Defence Industry.

Content is flexible to support context and outcomes – the standard delivery for this microcredential is below:



50 hours total commitment

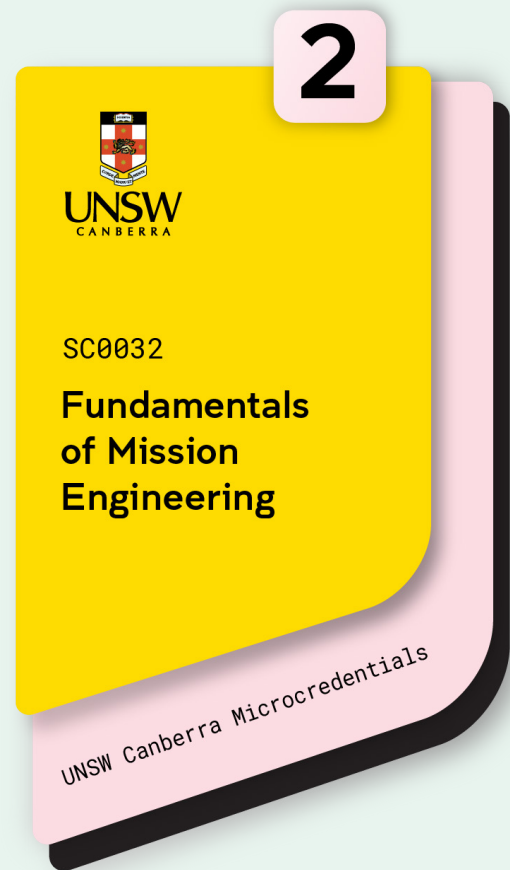
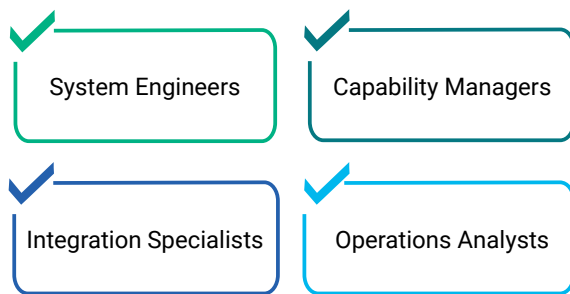
**Advance access to
course materials**

Full online support

Who is this course for?

This course provides foundation knowledge of the mission engineering framework and processes. It is well suited to anyone seeking a broad understanding of mission engineering or those taking a first step toward specializing as mission engineering professionals.

This course best suits:



Your Digital Badge

What will you learn?

By the end of this microcredential you will achieve the following learning outcomes:

- Describe the essential mission engineering and system architecture concepts and key terms and language
- Explain systems engineering and modelling concepts and fundamentals and how they relate and apply to mission engineering
- Demonstrate an ability to distil and construct a mission architecture and subordinate mission engineering thread from a single-domain problem statement

Why study this way?

As a form of accredited bite-size learning, microcredentials are designed to allow you to engage with education in a meaningful short-term way and tailor your lifelong learning journey. Delivery options include online, face to face or a combination of the two and are designed to fit in with your busy life where and when it's needed. You can undertake courses to further your career development, fill gaps in your knowledge or skill set, or even explore new areas of learning. The choice is yours.

A microcredential gives you access to UNSW in a way that suits you without the need to commit to enrolling in a full Postgraduate Program. You'll have access to world-class academics who have designed leading-edge courses and gain credit along the way.

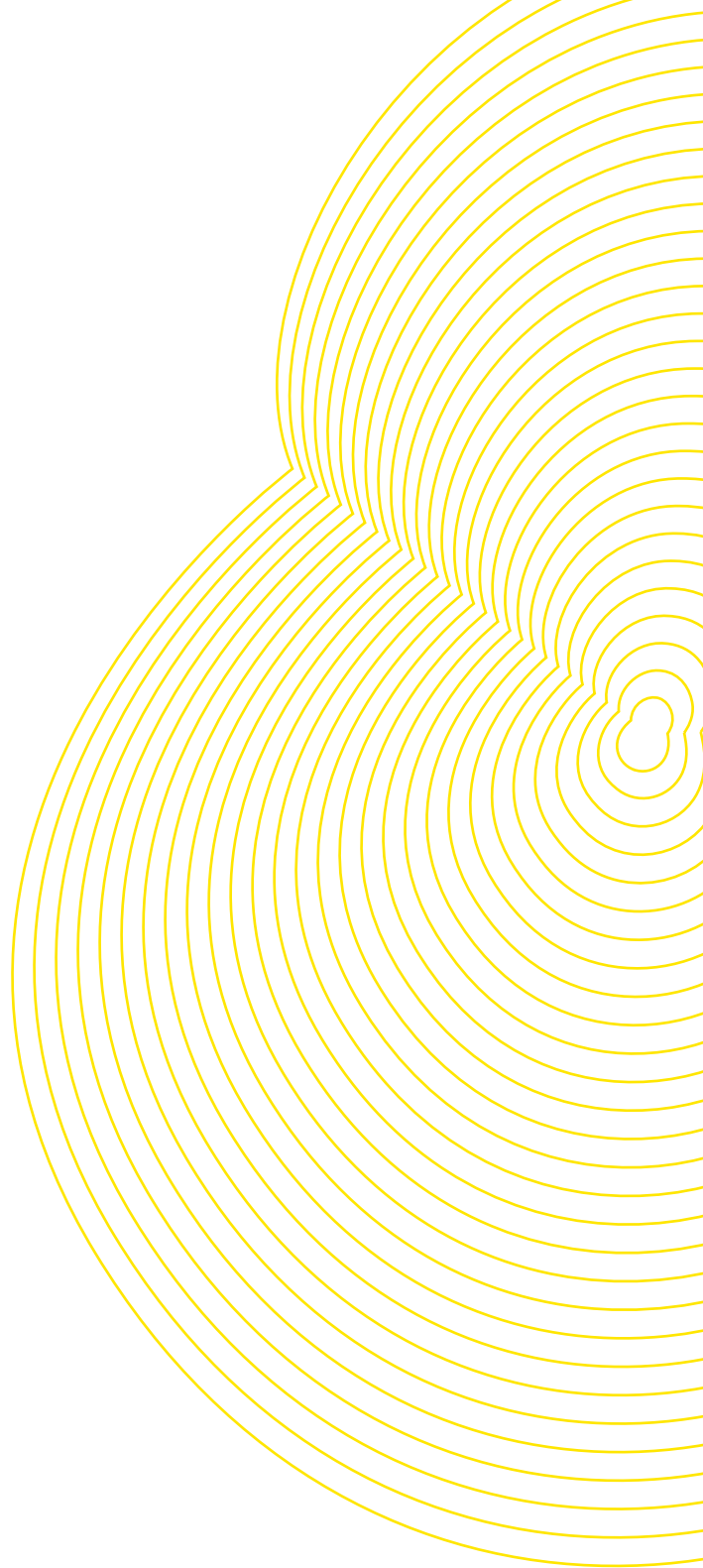
You'll receive a digital badge to showcase your learning and two units of credit (UOC) that can be stacked for Recognition of Prior Learning (RPL) for further postgraduate study.

How can this be tailored to you?

We are all about providing career long transformation and becoming your education partner of choice – because great partnerships never go out of style.

Together, we will build a dynamic partnership that identifies capability needs to uplift and progress your workforce and individuals throughout their careers. We will establish a clear foundation and working partnership, where your insights and needs are at the forefront of our collaboration. We invest in design collaboration to create tailored learning experiences that meet your needs where they are and when they are needed.

By partnering with us, you'll have access to UNSW Academics to lead your learning experiences. You'll also be able to tap into our extensive UNSW community and access opportunities for knowledge exchange, Alumni groups and our enduring partnerships network.



Want to find out more?

Get in touch and speak to someone about what Microcredentials can do for you.

unsw.edu.au/canberra/study-with-us/microcredentials

