



MICROCREDENTIAL COURSES

MBSE Fundamentals

***This 5-day course** is fundamental for learners to understand systems engineering and its application areas. The coursework includes gold standard industry toolkit – CATIA Magic which is the most advanced toolkit for applied systems engineering. This course will be delivered in a face-to-face classroom setting, featuring live instructor-led lectures and hands-on lab exercises. This course also provides access to a virtual environment for hands-on experience with the tool, along with a dedicated learning management system where learners can access all course materials and resources.*

Monday 18th — Friday 22nd August 2025
9:00am—5:00pm

Venue:

Delivered Online via Microsoft Teams.
The meeting link will be sent via email to participants following confirmed payment.



Course managed by MEMKO Systems, ABN 89 619 452 158

COURSE REGISTRATION

MBSE Fundamentals: Virtual

Name: _____

Company: _____

Address: _____

Telephone: _____

E-mail: _____

Registrations close Monday 5th August 2025

Email this form with your payment details to:

MEMKO Systems
Email: training@memko.com.au

Payment Method:

☐ Bank transfer (\$2,530) to **MEMKO AAD P/L BSB 033-060 Ac 437512**
☐ Charge my credit card:

☐ Visa ☐ MasterCard Amount: \$ 2,530

Number: _____ CVC: _____

Card expiry: __ / __ Cardholder Name: _____

Cardholder's Signature: _____

For further info, please contact MEMKO on 03 8605 7777 or training@memko.com.au
Tax invoices/receipts will be emailed to above email address.

COURSE OUTLINE

The course will cover the following topics:

- Understanding the application of MBSE languages, methods and tools
- Introduction to the SysML MBSE language
- Understand the SysML language features required to define static and dynamic system models
- Understand how to apply SysML modelling in MBSE tools
- Understand the applications of MBSE as part of a Digital Engineering solution

EXPECTED OUTCOMES

The MBSE Fundamentals microcredential is designed to give you a holistic understanding of MBSE and understand its applications to manage design complexity, compliance and risk management for a system of interest.

Within this microcredential you will:

- Establish a core understanding of MBSE and its application in the lifecycle of any system
- Understand detailed SysML language concepts relating to system requirements, structure and behaviours
- Apply the SysML language concepts in an MBSE tool to design a system
- How to apply MBSE as a key decision support tool in an organisation's digital engineering practice

COURSE LECTURER

Sam Mancarella

Systems Engineering Director, MEMKO

Sam qualified in Computer Engineering and Science and holds an MBA from RMIT University. He has over 25 years' experience as a cyber systems expert, ranging from digital transformation, IT systems development, software engineering and technology portfolio management.

Sam is an expert in Model Based Systems Engineering (MBSE) and Enterprise Architecture, helping customers adopt industry standards and best practices to deliver sustainable competitive advantage in a wide range of industries including Defence, Government, Telecommunications and Maritime within Australia and North America.

He has a deep understanding of MBSE standards such as SysML, UML, Archimate, BPMN, UPDM (now UAF) and DDS, working alongside industry leaders to adopt innovative products and services based on these technologies. Sam is passionate about the integration of data, systems, processes and people to deliver innovative solutions and enduring customer value.

COURSE ACCREDITATION

All participants who successfully complete this microcredential will receive a certificate of completion at the end of the course delivery.

COURSE PREREQUISITES

This course has no prerequisite learning requirements. This microcredential is suitable for principal engineers, systems engineers, system architects, specialists engineers and more.

COURSE FEES

Fee for this 5-day course is \$2,300 plus GST. This includes course notes. Course fees will be returned less a \$50 administration fee, upon receipt of a written cancellation notice before Monday 5th August 2025.

MEMKO reserves the right to cancel the course, in which case participants will be notified and the course fee will be returned in full. To avoid potential inconvenience, we recommend delaying any non-refundable travel or leave arrangements until the course is officially confirmed.

Places are limited.