



MICROCREDENTIAL COURSES

MBSE Essentials

***This 2-day course** will teach you the foundational principles about Model Based Systems Engineering (MBSE), its applicability in system engineering development. It will show students how CATIA Magic is used as the MBSE tool to define and analyse system models. It will also allow students to use the CATIA Magic toolset to interact, review and analyse a system model for engineering decision support.*

Tuesday 13th — Wednesday 14th January 2026
9:00am—4:00pm

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 Essentials: Virtual

Name: _____

Company: _____

Address: _____

Telephone: _____

E-mail: _____

Registrations close Tuesday 16th December 2025

Email this form with your payment details to:

MEMKO Systems
Email: training@memko.com.au

Payment Method:

☐ Bank transfer (\$1,815) to **memko systems Pty Ltd BSB 033-060 Ac 437504**

☐ Charge my credit card:

☐ Visa ☐ MasterCard Amount: \$ 1,815 inc GST

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:

- Understand MBSE and its application of developing and maintain a system throughout its lifecycle.
- Understand key SysML concepts relating to system requirements, structure, and behaviours.
- Apply MBSE as a key decision support tool in an organisation's digital engineering practice using analytical, data integration and collaboration tools.

EXPECTED OUTCOMES

Within this microcredential you will:

- Understand MBSE fundamentals and its role in system development and sustainment.
- Interpret and apply SysML concepts for requirements, definitions and analysis using CATIA Magic.
- Conduct design reviews and trade studies through hands-on workshops with real-world scenarios.
- Leverage MBSE for informed decision-making, improving collaboration and reducing project risk.
- Recognize frameworks and best practices for adopting MBSE within digital engineering environments.

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 2-day course is \$1,650 plus GST. This includes course notes. Course fees will be returned less a \$50 administration fee, upon receipt of a written cancellation notice before Tuesday 16th December 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.