

## Microcredential

# MBSE Fundamentals For Systems Engineering SysML v2

This course provides a foundational understanding of Model-Based Systems Engineering (MBSE) using the latest Systems Modelling Language, SysML version 2 (SysMLv2), to specify, define, and analyse a system of interest in terms of its requirements, structure, and behaviour.

Participants will use the CATIA Magic MBSE toolset to create SysMLv2 models and apply them to system analysis and design verification. The course combines instructor-led modules with hands-on laboratory exercises to demonstrate modern, model-based systems engineering practices and emerging SysMLv2 capabilities.

## What is Covered?

- Introduction to MBSE fundamentals, SysML v2 concepts, and the use of CATIA Magic
- Capturing and managing system requirements, items, attributes, and structural definitions using SysML v2
- Modelling system behaviour using SysML v2 actions, states, and occurrences
- Applying SysML v2 views, analysis, verification, and adoption strategies for modern systems engineering

## Expected Outcomes

Upon completion of this course, students will be able to:

- Understand what MBSE is, why it is important, and how to apply it across the development lifecycle of a system of interest.
- Understand core SysMLv2 MBSE language concepts relating to system requirements, structure, and behaviours.
- Create a SysMLv2 model to define and analyse a system using CATIA Magic.
- Apply MBSE as a key enabler within their organisation's engineering practices and understand key considerations for its adoption.

A laptop is required to access the learning systems and MBSE tools provided via memko's upskill systems

### Credential Information

#### Duration

4 Full Days

#### Location

Face To Face

#### Suitable For

Principal Engineers, Systems Engineers, System Architects, Specialist Engineers

#### Cost

Get in touch for pricing enquiries

#### Contact

For more information and to register contact us:

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Students attending this course should be familiar with general systems and engineering concepts. A specialist engineering qualification is not required.

For more information on the advanced course, please get in touch.