



# Cross-Platform Digital Design

## Upskilling and digital tool training

Dive into the dynamic world of digital design with our comprehensive microcredential program! Explore everything from machined parts and sheet metals to advanced post-processing techniques. Whether you're passionate about **metallics** or **composites**, our tailored pathways are designed just for you. Unleash your creativity and transform your ideas into reality!



\* Pre-requisite: Composite Design and Analysis  
 \*\* Pre-requisite: Design for Mechanical Engineers



Self Paced



Instructor Led

# Composite Design and Analysis

This course aims to develop skilled personnel and enhance expertise in the digital composite design journey. Learners will learn how to leverage advanced design tool functionality to simplify complex composite designs. The coursework includes self-paced learning materials with videos, case studies, recorded lectures, and peer reviewed journals for advanced learnings.



### Duration

24 Contact hours



### Suitable For

Design Engineer, Composite Materials Engineer, Manufacturing Engineer



### Study Mode

In Person or Online

## What is Covered

### Composites design

- Introduction to Composite design
- Designs for Manual and Automatic Manufacturing Processes
- Design principles, geometry considerations and guidelines for composites

### Composites simulation

- Structural and thermal simulations (Finite Element Analysis – FEA)
- Elastic, Plastic and Damage simulations
- Manufacturability Analysis and Simulate Manufacturing Process

## Expected Outcomes

- Understanding usage of PLM tools in designing composites engineering
- Be able to prepare engineering data for and execute FEA simulations
- Ability to perform structural and thermal simulations for composites
- Knowledge of manufacturability analysis on composite designs and run simulations

*For enquiries about pricing or course delivery, please contact us for a detailed discussion*

For further information, please contact us:

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## About MEMKO Systems

MEMKO Systems is an Australian-based company with multidisciplinary engineering capabilities supported by highly experienced and skilled staff with an extensive track record working with global OEMs, Defence Primes, and Government Agencies. MEMKO Systems delivers advanced manufacturing solutions, digital transformation technologies and industry upskilling training. Quality management system is ISO9001 and ISO27001:2013

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## Capability Areas

Analysis, Modelling & Simulation	✓
Digital Twin & MBSE as a Service	✓
Design & Engineering	✓
Infrastructure as a Service	✓
Deployment, Support and Upgrade Services	✓
Training Courses	✓