

# BUILDING THE FUTURE

SKILLING | INNOVATION | INDUSTRY COLLABORATION



# About Us

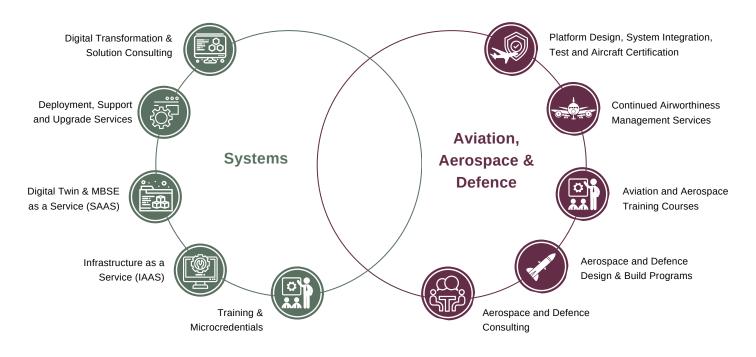
MONASH RMIT DEAKIN University UNIVERSITY Australian Australian Government National epartment of Industry University QUT Queensland University of Technology MACQUARIE NEWCASTLE University UNIVERSITY OF WOLLONGONG AUSTRALIA (P) THE UNIVERSITY ANTERBURY

AUCKLAND

We are engineering and technology an company with deep expertise in digital engineering, manufacturing, and training. We support the development of the future workforce by integrating industry-leading tools into education, bridging the gap between academia and real-world industry innovation.

As a trusted reseller of Dassault Systèmes' 3DEXPERIENCE platform, we equip universities and research institutions with the same advanced tools we use in industry for design, simulation, and lifecycle management. By fostering collaboration across sectors, our goal is to help build a **connected innovation ecosystem** that accelerates technological progress, develops future-ready skills, and drives sustainable innovation.

# **Capabilities**





# Partnering for Workforce & Innovation

The 2021 Engineering Change report by the Australian Council of Engineering Deans highlighted a critical skills gap in the sector, with **Professionals Australia projecting a shortfall of 200,000** engineers by 2040. At MEMKO, we see an opportunity to bring hands-on experience in real-world engineering tools, methodologies and problems to university students through a variety of collaboration models and partnerships, focused not only on building the future workforce, but building a connected innovation ecosystem that shapes the future of engineering.

We actively invest in research partnerships that advance digital engineering and innovation. By supporting academic research with **industry-grade technologies**, we enable breakthroughs that benefit academia, industry and government. Through these efforts, we ensure that future engineers are not only workforce-ready but also contributors to engineering innovation, **driving impact across the entire innovation ecosystem**.



"Expected graduate outcomes of the future will be delivered by programs that focus more on practice, address real world complexity, and integrate the development of technical and nontechnical competencies to provide real-world learning."

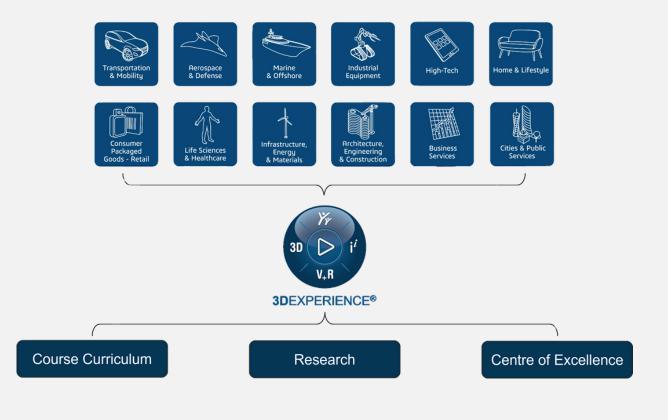
ACED 2021 Engineering Change report



# Our Collaborative Approach

Cutting-edge technology is essential to shaping the future of engineering. **Dassault Systèmes' 3DEXPERIENCE** platform is at the heart of our strategy, serving as the connective tissue that links education, industry, and research. The 3DEXPERIENCE platform is revolutionizing industries across 12 key verticals, from aerospace to healthcare, by streamlining design, simulation, and lifecycle management processes.

Through our collaboration and investment with academic institutions and industry leaders, the platform empowers the next generation of engineers and researchers to work with the same tools used by global innovators. By connecting education, research, and innovation, 3DEXPERIENCE ensures that students are equipped with real-world skills and that research initiatives remain at the cutting edge, fostering an innovation ecosystem. This seamless integration of industry knowledge into curricula and research, accelerates progress across all sectors.



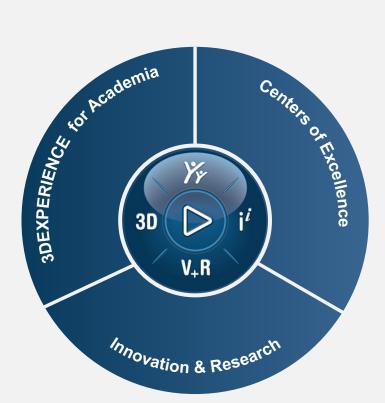


# Our Collaborative Approach

#### INDUSTRY TOOLS TO EMPOWER STUDENT LEARNING

Learning & Teaching on Industry Best practices and toolkits for applied learning

- Classroom Teaching
- Integrated Labs, workshops
- Capstones Projects



#### STATE OF THE ART FACILITIES

Industry Transformation Catalyst – Experience Centers delivering

- Upskilling
- Industry demonstrators
- Digital Showrooms

#### **COLLABORATION TO DRIVE RESEARCH INNOVATION**

Industry relevant research leveraging best practices and methods

- PhD's
- CRC Projects
- ARC Research
- Start-up and Innovation Incubators

#### **MEMKO Training and Development**



#### COMPREHENSIVE TRAINING PORTFOLIO

MEMKO offers a wide range of training and learning programs for students, professionals, and institutions.

Micro-credential courses on MBSE, Digital Twins, Digital Manufacturing are among a few of the short courses MEMKO can provide - tailored to suit the specific requirements of our partners.

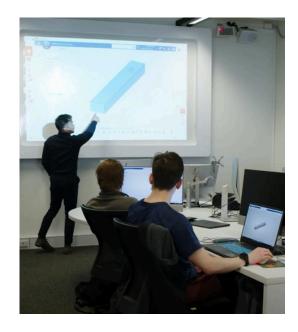


### Academic Success Stories RMIT University

RMIT is a world leading university in Design, Architecture, Education, Engineering, Computer Science and Information Systems, Business, Communication and Media Studies. With over 95,000 students, RMIT has a global reputation for excellence in professional and vocational education, applied research, and engagement with the needs of industry and communities worldwide.

RMIT recognised the need to ensure students are work-ready. With many of the companies, students will be moving into using the Dassault Systemès solution, RMIT needed to ensure students are acquiring the right skills between the transition from student life to the workforce.

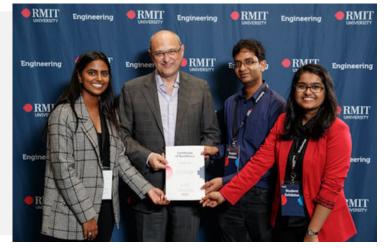
Additionally, RMIT wants to provide students with more flexibility and accessibility for students' learning experience while maintaining its world-class standard of teaching. In partnership with Dassault Systèmes and its value partner MEMKO, RMIT University adopted the 3DEXPERIENE Platform to enable mechanical engineering students to become accredited and certified in advanced 3D design, simulation, manufacturing and project management.



The 3DEXPERIENCE platform is at the forefront of equipping future engineers with industry-ready skills and opportunities for employability across 12 different industries.

"The key goals that we have at RMIT is to ensure that all our graduates are ready to work with the industry and that's why our partnership with Dassault Systemès is so important to help them become more work ready."

Adrian Mouritz Dean of Engineering at RMIT University





### Academic Success Stories University of Southern Queensland (UniSQ)

The University of Southern Queensland (UniSQ) is leading the way towards building innovative solutions for Australia within the Centre for Future Materials (CFM). CFM is pioneering research and development in advanced composite manufacturing for civil, mining and aerospace sectors to name a few. Due to composites having multiple layers of materials oriented in different directions, the ability to

implement a repair that is unique and most suitable for that location can be challenging.

CFM quickly recognised the need to adopt a virtual twin solution to streamline its processes. Whilst existing tools for digital twin could be used, many don't feature a continuous thread of data flowing from the initial inspection through to the design and manufacturing of that repair patch, and then back into service.

Inspired by similar uptakes by industry leaders, CFM, MEMKO and Dassault Systèmes recognised the need to adopt virtual twin software to create a

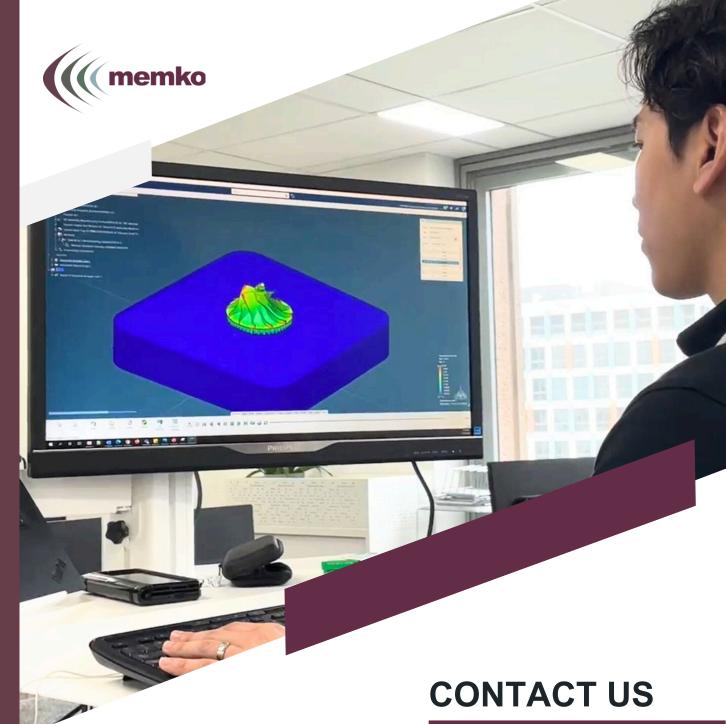


new automated and streamlined repair process solution of composite structures for aerospace. The Dassault Systèmes suite provides a tool to create not only Digital Twins for all stages of the aircraft components lifecycle, but the potential to create a digital thread of data from design all the way through to MRO.

"This collaboration allowed the team to produce a fit-for-purpose solution for industry. From an academic perspective, it gives us the tools we need to produce high-quality and highimpact publications."

> Dr. Tristan Shelley Senior Research Fellow at UniSQ







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