The Advanced Manufacturing Precinct (AMP)

RMIT University’s AMP facility brings together research, design and advanced manufacturing in one location, opening the doors to new opportunities for innovation and product development/prototyping, using advanced product design and advanced materials manufacturing.

The AMP facility will train the designers, engineers and technicians of tomorrow, by focusing on advanced manufacturing technologies, materials and processes and design solutions associated with critical manufacturing industry sectors for Australia.

RMIT will deliver cross-disciplinary training, exploiting the dual sector advantage, to meet whole-of-industry needs by incorporating teaching in engineering and advanced manufacturing technologies, applied design, R&D, production, marketing and management. Training offered in the precinct will complement research in the University’s $56 million Design Hub in advanced engineering, and in textile design and technology.

The users of the AMP are working across TAFE and Higher Education schools to create a precinct that brings together the best parts of engineering and design disciplines within RMIT.

Advanced manufacturing

New manufacturing technologies, materials and processes are being developed and introduced to enable advanced manufacturing for the future.

Digital manufacturing technologies housed at RMIT’s AMP include, high speed multi-axis machining centres that use subtractive processes and additive manufacturing technologies, and include Selective Laser Melting (SLM) and Fused Deposition Modelling (FDM).

The equipment can build final products direct from a computer model in diverse materials, ranging from timber and polymers, to resins and composites or metals and high tech alloys. Highly accurate digital coordinate measuring machines (CMM) will allow detailed verification for quality assurance and reverse engineering.

As a result, some traditional manufacturing processes such as cutting, milling, grinding, tool-making, die-casting and plating can be by-passed. This offers dramatic savings in time, materials, energy and other costs, and significant reductions in adverse environmental impact.

These new manufacturing technologies will enable the production of a greater diversity of innovative products that meet a very wide range of consumer needs compared to conventional manufacturing technologies.
State-of-the-art-facilities
The $15M RMIT AMP will showcase up-to-date and relevant advanced manufacturing technologies and processes, and create a facility where industry can exhibit and be involved in these new technologies.

The AMP is establishing ongoing partnerships with industry, including applied research for new and emerging manufacturing technologies and processes, educational development and innovation.

Contact details
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About RMIT University
The Royal Melbourne Institute of Technology is one of Australia’s original and leading educational institutions, producing some of Australia’s most employable graduates. As an innovative, global university of technology, with its heart in the city of Melbourne, RMIT has an international reputation for excellence in work-relevant education and high quality research, and engagement with the needs of industry and community.

With more than 70,000 students studying at RMIT campuses in Melbourne, in Vietnam, online, and at partner institutions throughout the world, the University is one of the largest in the country. It has built a worldwide reputation for excellence in professional and vocational education and research. A vibrant alumni community now stretches across more than 100 countries.

RMIT is a member of the Australian Technology Network.