Gain the skills to be a technological leader capable of managing innovation in both automotive design and manufacturing settings.

Designed to meet the needs of the global automotive industry, you’ll develop the skills to take a leading role in automotive engineering design, manufacturing and testing using contemporary engineering methods and computational and experimental tools.

You have the flexibility to specialise in either advanced automotive design and development or automotive manufacturing.

You will use advanced computer-aided engineering software such as LS-DYNA and Abaqus and gain hands-on experience in several state-of-the-art experimental facilities, including the full-scale Vehicle Wind Tunnel, Green Engines Research Laboratory and Vehicle NVH Laboratory.

The program has a focus on sustainable design and manufacturing practices based on the entire life cycle (from ‘cradle to grave’) of vehicles. This incorporates the design for disposal and recycle, disassembly, life cycle assessment, alternative fuels and powertrains, and light structures.

You will develop a comprehensive understanding of the product life cycle and systems design of modern automobiles and associated technologies. This understanding is developed through project-based learning involving real-life problems in cooperation with industry both locally and internationally.

You will have the opportunity to do work experience in multinational companies, enhancing your employment opportunities in the global job market. There are also exchange opportunities between RMIT and universities worldwide, including opportunities for dual Masters’ awards.

Learning and teaching
The integration of classroom learning and workplace experience provides you with the opportunity to apply your knowledge and problem-solving skills in a real workplace setting.

You’ll also have access to highly qualified visiting staff from overseas industry and universities who are well versed in current and future trends in the global automotive industry.

In addition you will have the opportunity to complete comprehensive work placement program that incorporates research experience at leading automotive companies worldwide.

Career outlook
Graduates will be able to work effectively as automotive engineering specialists, leading technological innovation in cross-disciplinary teams. They will be able to work effectively within, and between, geographically and culturally diverse settings with a broad understanding of the complex automotive supply chain and logistics involved.

Professional recognition
This program does not yet have accreditation from Engineers Australia. Accreditation will be sought for this program as soon as it is feasible to do so within the accreditation timelines set by Engineers Australia.

International opportunities
This program has dual master agreements with the Ingolstadt University of Applied Sciences in Germany and the University of Applied Science in Aachen, Germany.

Five students per year have the opportunity to take part in the dual masters’ program and receive master’s degrees from both institutions. Eligibility and selection criteria for admission into the dual award apply as follows:

Eligibility: Applicants must be enrolled in the single award program, Master of Engineering (International Automotive Engineering).
Master of Engineering (International Automotive Engineering)

Selection: Academic merit (based on cumulative GPA).

Students who are interested in the dual masters’ program will be invited to submit an expression of interest to the Program Manager by week 10 of their first semester of study at RMIT.

Students who select to pursue the RMIT International Experience and Research Program (RIERP) will have the opportunity for an industry placement with a major overseas automotive manufacturer or supplier such as Volkswagen, Audi, BMW or Siemens.

Program structure
The Master consists of 192 credit points.

In this program, you’ll complete specific course(s) that focus on work-integrated learning (WIL). You’ll be assessed on professional or vocational work in a workplace setting (real or simulated) and receive feedback from those involved in industry with capital-intensive assets and engineering systems.

You’ll work with practitioners in the automotive industry environment, using complex software and equipment, analysing real automotive design and manufacturing case studies, and proposing and evaluating new automotive designs.

The capstone Master’s Research Project, which is undertaken in second year, involves WIL through an industry-relevant project.

Work experience
From Semester 2, 2017, as part of the program you must complete at least 12 weeks of work experience in a professional engineering environment. Work experience completed prior to joining this program and after commencing a relevant bachelor degree (see Entry requirements) may count towards the work experience component.

Year 1
Complete the following core courses:
- Management of Automotive Design and Development
- Management of Automotive Manufacturing Engineering Processes
- Computational Engineering for Automobile Applications
- Vehicle Noise Vibration Harshness
- Automotive Materials
- Automotive Systems and Control
- Advanced CAE for Automotive Applications
- Vehicle Power – Train Technologies.

Year 2
Complete the following core courses:
- Research Methods in Engineering
- Advanced Vehicle Dynamics.

And complete:
- two elective courses.

Elective courses
- Automotive Electronics
- Special Topics in Engineering
- Building Quality Organisations
- Management of Technology
- Industrial Systems and Environment
- Performance Management Foundations
- International Engineering Management
- Manufacturing Strategy and Planning
- Computer Integrated Manufacturing
- Design for Manufacture
- Intelligent Materials and Processes
- Planning and Control
- Integrated Logistics Support Management
- System Simulation and Characterisation
- Logistics Engineering and Systems
- System Engineering Principles
- Photovoltaic Systems
- Electrical Energy Storage Systems
- International Industry Experience 1
- International Industry Experience 2

How to apply
Direct to RMIT University:
rmit.edu.au/programs/apply/direct

Semester 1, 2017
- Applications open 14 August 2016
- Timely applications close 10 November 2016

Semester 2, 2017
- Applications open 1 May 2017
- Timely applications close 31 May 2017

Late applications will continue to be accepted after this date if places are still available.

Entry requirements
- An Australian bachelor degree (Bachelor of Technology, Bachelor of Engineering Science or Bachelor of Engineering), or equivalent, in the fields of aerospace, mechanical, manufacturing, mechatronics, sustainable systems or automotive engineering.

Applicants with a GPA of less than 2.5 out of 4.0 may be considered on a case-by-case basis, with consideration given to at least two years’ relevant work experience in industry.

International qualifications are assessed according to the Australian Qualifications Framework (AQF).

Fees
2017 indicative fees
- Commonwealth supported places (CSPs) range from AU$6,349 to AU$10,596
- Full-fee: AU$29,760 per annum

How much you’ll pay will depend on whether you’ve offered a Commonwealth supported place or a full-fee place. Entry for this program is primarily through CSPs. Government financial assistance is available to eligible students regardless of the type of place you enrol in.

For more information and to learn how to calculate your exact tuition fees see:
rmit.edu.au/programs/fees/postgraduate