



ENGINEERING ASSET MANAGEMENT

www.uow.edu.au/eng/flexibledelivery/engineeringassetmanagement

The vast majority of engineers in Australia, and around the world, are involved in managing engineering assets. Every day decisions are made that affect the lifecycle cost of a company's highly valued assets and there are increasing expectations to demonstrate competency and transparency in these decisions. Engineering Asset Management has evolved into a recognised discipline and this course draws on evolving International Standards and best practice to equip asset managers to make rational decisions in an increasingly uncertain world.

WHY STUDY AT UOW?

The University of Wollongong has been offering leading, internationally recognised programs in Engineering Asset Management since 1992.

The courses have been developed in collaboration with key engineering asset driven organisations, to address industry needs and requirements, and are delivered by leading academics and industry experts.

UOW has a unique partnership with the Australian Nuclear Science and Technology Organisation (ANSTO) providing students with access to experts in the field of reliability engineering and system safety as part of their study program.

Our capability is built on many years of practical experience in supporting major Australian and International engineering asset owners and maintainers such as Mass Transit Railway Corporation Hong Kong, RailCorp, Energy Australia, Sydney Water and BlueScope Steel.

MR ANDREW MCCUSKER

OPERATIONS DIRECTOR, MTR CORPORATION HONG KONG

"Within MTR we move more than 4 million people per day at a sustainable 99.9% service performance. Railways are an asset intensive low margin business and we are convinced that the key to our success is our innovative approach to Asset Management; we consider it is imperative that we are always at the forefront. For more than a decade we have maintained a close liaison with the University of Wollongong.

The course has greatly benefitted our Company by educating our staff, making them highly competent in asset management. We aim to be a Leader in Asset Management and this course and our continuing partnership with the University of Wollongong is a critical element in us achieving that goal."

WHO WILL BENEFIT FROM THESE COURSES?

These courses have been designed to benefit a wide range of professionals, including:

- Business Managers
- Risk and Safety Managers
- Quality Managers
- Management Consultants
- Asset Managers
- Systems Engineers
- Project Managers
- Design Managers
- Plant and Operations Managers
- Maintenance Managers
- Procurement Managers
- Reliability Engineers

Graduates have the potential to progress to senior management positions.

MODES OF DELIVERY

The current delivery methods available include modular delivery and weekly delivery.

The modular delivery method combines face to face workshops with substantial online materials and support for students that are unable to attend weekly classes. The workshops provide opportunities for networking and help facilitate teamwork and interaction among peers and leading academics. The online materials enable students to study at a time that best suits them and the online discussion forums provide an opportunity for further interaction, feedback and continued support. This mode is also available for international delivery.

The weekly delivery method is a more traditional method providing weekly face to face contact and interaction with peers and academics. The University of Wollongong highly values this form of delivery and believes personal contact is the key to achieving quality education.

Enquiries about alternative delivery modes are welcome.



WHAT WILL YOU STUDY?

These courses have been uniquely designed for professionals to develop or enhance their skills in the strategic and tactical issues associated with the management of assets. Delivered from a strategic framework, the courses provide structured learning and development. The courses take a problem-based approach to learning and are focused on evaluating potential solutions to challenges faced by organisations.

The key areas covered include risk management; acquisition management; design of maintenance regimes; reliability and systems engineering; resource planning, design and management; contract management; management of people, organisations and change; and information systems.

MASTER OF ENGINEERING ASSET MANAGEMENT

The **Master of Engineering Asset Management** is only available part-time and can be completed in two years. The subjects that you will study include:

- ENGG958 Life-Cycle and Risk Management
- ENGG960 Maintenance Requirements Analysis
- ENGG961 Systems Reliability Engineering
- ENGG953 Modelling of Engineering Management Systems
- ENGG956 Financial Management for Engineered Assets
- ENGG957 Project Implementation and Outsourcing

You can then choose from the following two options:

- ENGG959 Asset Management and System Design, and
- TBS903 Managing People in Organisations

Or

- ENGG940 Dissertation (equivalent to two subjects)

GRADUATE CERTIFICATE IN ENGINEERING ASSET MANAGEMENT

A **Graduate Certificate in Engineering Asset Management** is also available and comprises ENGG958 Life-Cycle and Risk Management, ENGG960 Maintenance Requirements Analysis, ENGG961 Systems Reliability Engineering, plus one other subject chosen from the Masters program.

For detailed subject descriptions, please refer to our website.



SHANNON MEISSNER

MASTERS OF ENGINEERING ASSET MANAGEMENT

As an engineer with the goal of pursuing a career within the asset management field, I found that I needed to further my education and knowledge to be able to gain promotion within the industry.

The University of Wollongong's Master of Engineering Asset Management is regarded as an essential course in the asset management field. Therefore it was the only course I considered when choosing to further my education.

The coursework was practical and relevant to both my personal and work experience. I enjoyed the tutorials and group work assignments as they allowed me to further my knowledge by learning from the varying experience of the lecturers and students involved in the course.

Through lecturers direct from industry with years of experience, I found that there was a wealth of knowledge available.

The tutorials also made it possible to build working relationships with other engineers employed within the asset management industry.

The Master of Engineering Asset Management has been an excellent tool in my career progression. The skills and knowledge gained from this degree have allowed me to move into an asset management role. Asset management is a growing industry and I am sure that I will gain further promotion as a result of completing this course.

I would recommend UOW's Master of Engineering Asset Management to any engineer who wishes to pursue a career within the asset management field.

It is a demanding course; however the gains for employees and employers far outweigh the cost and effort required in completion of the course.

ENTRY REQUIREMENTS

A Bachelor degree in engineering from a recognised tertiary institution. Applicants without a Bachelor degree in engineering may be considered based on other qualifications together with relevant work experience.

STARTING DATES

February (Autumn session) or July (Spring session)

FEES

For a full list of fees please refer to the following website:

www.uow.edu.au/eng/flexibledelivery/engineeringassetmanagement/UOW064918.html

HOW TO APPLY

Please visit the following website for detailed information on how to apply:

www.uow.edu.au/future/postgrad/apply/coursework

WANT MORE INFORMATION?

For more detailed information please visit our website:

www.uow.edu.au/eng/flexibledelivery/engineeringassetmanagement