

## **MASTER'S DEGREES**

# ENGINEERING & COMPUTER SCIENCE 2022/23



Your Australian University in Dubai

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We are considered a benchmark for educational establishments in the region: dynamic, agile, innovative and praised for the quality of our teaching and research 99

## Dean's Message



**Professor Khalid Hussain**Dean
Faculty of Engineering and
Information Sciences

A warm welcome to the Faculty of Engineering and Information Sciences!

Engineering and Information Sciences is about creating innovative and smart technologies or products that can make a difference in our everyday lives. This is why the world needs unique talents and skills. At UOWD we lead the way in graduating future generations of innovators and highly skilled engineers and computer scientists.

The Faculty of Engineering and Information Sciences trains hundreds of Engineers and IT specialists each year.

Our specialised labs not only provide support for our forward-thinking and skill based curricula but it provides a venue for students to conduct research and build their skills in an advanced professional environment.

UOW Australia is a member of the Group of Eight (Go8) Deans of Engineering and Associates, in recognition of it being among the top Australian engineering faculties. This achievement is a direct result of our world class reputation in teaching and research.

All our programs are skill based, practiceoriented and reflect the latest trends and technologies that meet the needs of the regional and global market, making our graduates highly competitive.

Our academics are top-of-their-class and representing several nationalities from around the globe, they have extensive teaching and industry experiences. They are active researchers and focussed on producing outstanding research with outcomes that will benefit the community on a regional and international level.

Our strong connections with the industry will provide you with additional opportunities to participate in real-life challenges, enabling you to step into the world with confidence.

Our aim is to provide you with a unique learning experience and to develop our future industry leaders.

I hope to personally welcome you at the Faculty in the near future!



## **About University of Wollongong in Dubai**

Established in 1993, University of Wollongong in Dubai (UOWD) is the first international and Australian university in the UAE, and is now part of a global brand that has campuses in Australia, Hong Kong and Malaysia.

With a 28-year track record, the University offers internationally-recognised degrees that are accredited by the Commission for Academic Accreditation (CAA) of the UAE Ministry of Education, licensed by the Knowledge and Human Development Authority (KHDA) and quality assured by UOW, which is registered with the Tertiary Education Quality Standards Agency (TEQSA), Australia's independent national quality assurance and regulatory agency for higher education.

UOWD's curriculum and teaching practices reflect those of UOW Australia, which ranks among the top 1%\* of universities worldwide. The institution offers over 40 programs including bachelor and master degrees spanning over 10 industry sectors, such as engineering, business, ICT, healthcare, communications and media. These degrees are formally recognised by leading professional organisations such as AACSB, CIPD, ACCA, CPA, AHRI, CIM, CIMA, CIPS, EFQM and ACS.

UOWD has a strong cohort of highly qualified academic staff, each holding PhD degrees and recognised as leaders in their fields of expertise, with strong global and industry ties. The faculty members are active researchers, involved in research activities across 100 different fields.

UOWD boasts many alumni who have made a mark across the world through notable contributions in various industries and professional sectors at leading multinational organisations such as Microsoft, GE, IBM, Deloitte, Fedex, 3M, Adidas, Amazon, Emirates, Etisalat, ADCB and Pepsico.

UOWD offers international students the opportunity to transfer between the university's campuses for a holistic global higher education experience.

As part of its continued pursuit of excellence in teaching, research, industry engagement and student experience, UOWD inaugurated its new purpose-built 200,000-square-foot campus at Dubai Knowledge Park in 2020. Featuring cutting-edge technologies, modern architecture, and a mix of traditional and innovative learning spaces, the campus provides an enriched experience to meet the demands of today's student population, while supporting the teaching staff and community research projects.

UOWD is the first international accredited Australian university in the UAE, and currently has over 3,500 students from 108 nationalities and a global community of 152,000 alumni.

<sup>\*</sup>QS World University Rankings 2022

## Ranks among the top 1% of universities worldwide\*

\*QS World University Rankings 2022



More than

3,400

Students

Students from

108

Different Nationalities



12,479

Total Degrees Awarded





### **Master of**

## Information Technology Management

The Master of Information Technology Management (MITM) is for IT graduates and professionals who want to develop the skills needed to be part of an increasingly dynamic information technology industry. Throughout the duration of the degree you will:

- Acquire the skills and knowledge to anticipate, manage and deliver technological advances in order to gain a competitive advantage in a commercial setting.
- Learn how to integrate IT with fundamental business concepts and functions, enabling you to make the best business-technology decisions.

## **Industry Focussed**

There is a rising demand across all business sectors for IT experts who can add value to organisational processes through the application of information and technological innovation. UOWD's MITM degree has been designed in collaboration with key industry stakeholders, meaning that graduates develop the leadership skills they need throughout the degree to progress to senior roles in information management and governance. Our compulsory professional practice and research project will allow you to investigate an industry issue, giving you a real-world experience and the opportunity to develop and apply the skills you have learnt throughout your master's degree.

## **Program Structure**

There are two entry levels to the Master of Information Technology Management. If you have completed a three year bachelor's degree, or a four year bachelor degree without a research component, you will enter the MITM at the foundation level. This will involve taking two subjects prior to starting out on the degree, to be decided in consultation with the Faculty. If you have completed a four year degree that included a research component, you will enter directly onto the degree and complete 9 subjects.

#### **Career Paths**

Include roles such as:

- ✓ Systems Analyst
- ✓ Network Manager
- ✓ Security Specialist
- ✓ Data Centre Manager
- ✓ Internet Architect

Level	Subject Name		
	· Information Systems and Strategy		
	· IT Governance and Organisational Issues		
Carra Carlain ata	· Security, Ethics and Professionalism		
Core Subjects	· Project and Change Management		
	· Data Mining and Knowledge Discovery		
	· Innovation and Design		
	Economic Analysis of Business		
	· System Integration		
	· Organisational Issues & Information Technology		
	Business Intelligence and Knowledge Management		
	· Strategic Network Management		
Electives*	· Digital Marketing		
	· Organisational Analysis		
	· Total Quality Management		
	· Strategic Procurement Management		
	· Operations Management		
	· Cross-Cultural Management		
Capstone Project**	Professional Practice and Research Project		

<sup>\*</sup>Students are required to choose two electives from the approved list. Elective options are subject to availability.
\*\*Equivalent to two subjects

## **Program Director**

Prof Farhad Oroumchian, Associate Dean (Education),

PhD, Syracuse University

## **Duration of the Program**

This program will normally take you five - six trimesters to complete (with summer as an optional trimester). Classes are held from 6:00pm - 10:00pm, Monday to Friday with occasional Saturday classes. Each subject requires one evening of attendance for 11 weeks.



### **Master of**

## **Engineering Management**

Master of Engineering Management (MEM) is for engineering graduates who are looking to develop their skills and competencies to manage large-scale engineering challenges. Throughout the duration of the degree you will:

- Acquire the skills to successfully integrate technical and project management skills while optimising the use of personnel, resources, equipment and information to deliver successful engineering projects.
- Learn how to develop and demonstrate creative, analytical and conceptual skills to analyse, diagnose and execute strategic judgements across all engineering functions.
- Learn how to manage teams effectively and to understand managers from other disciplines.
- Acquire the technical skills to support decisionmaking processes in complex business and industrial environments.

**Engineering** 

Management

Project Management

Technical Management

Creative Skills



## **Industry Focussed**

There is a rising demand across the MENA region and beyond for engineering professionals who can combine both technical and management expertise. UOWD's MEM degree has been designed in collaboration with key industry stakeholders, meaning that graduates develop the leadership skills they need. The compulsory dissertation subject will also allow you to solve a specific practical engineering problem, giving you a real-world experience and the opportunity to develop and apply the skills you have learnt throughout your master's degree.

## **Project Management Professional (PMP) Qualification**

The Project Management Professional (PMP) is the most important industry-recognised certification for project management. By choosing to enrol for UOWD's MEM degree and taking the Engineering Project Management core subject, you will be satisfying one of the key application criteria for the qualification as you are able to use this subject as evidence of your 35 hours of project management education.

## **Program Structure**

There are two entry levels to Master of Engineering Management (MEM). If you have completed a three year bachelor degree or a four year bachelor degree without a research component, you will enter the MEM degree at the foundation level. You will need to complete two additional subjects, to be decided in consultation with the Faculty, prior to starting the degree. If you have completed a four year degree which included a research component, you will enter the degree directly and complete 9 subjects.

#### **Career Paths**

Include roles such as:

- ✓ Engineering Manager
- ✓ Plant Manager
- ✓ Project Manager
- Engineering Supervisor
- ✓ Process Engineer

Level	Subject Name		
	· Innovation and Design		
	<ul> <li>Engineering Project Management*</li> </ul>		
	<ul> <li>Modelling of Engineering Management Systems</li> </ul>		
Core Subjects	<ul> <li>Strategic Management for Engineers and Technologists</li> </ul>		
	· Financial Management for Engineered Assets		
	· Engineering Logistics		
	· Advanced Project		
	Asset and Maintenance Engineering Elective Subjects:		
	· Life-Cycle and Risk Management		
	Systems Reliability Engineering		
	Maintenance Requirement Analysis		
	Construction and Contract Management Elective Subjects:		
Electives*	· Construction Management		
	Project Implementation and Outsourcing		
	Sustainability for Engineers Scientist and Professionals		
	Other Elective Subjects:		
	· Data Mining and Knowledge Discovery		
	· Supply Chain Management		
	· Organisational Analysis		
	Sustainable Roads and Railway Engineering		

<sup>\*</sup>Students are required to choose two electives from the approved list. Elective options are subject to availability.

## **Program Director**

**Dr Mama Chacha,** Associate Professor, PhD, Université Aix-Marseille I, France

## **Duration of the Program**

This program will normally take you five - six trimesters to complete (with summer as an optional trimester). Classes are held from 6:00pm - 10:00pm, Monday to Friday with occasional Saturday classes. Each subject requires one evening of attendance for 11 weeks.



## **Certificate of Proficiency**

At the University of Wollongong in Dubai (UOWD), we offer a number of options for masters professionals seeking the specialised knowledge and skills that will allow them to move forward in today's competitive world in the shortest possible timeframe, but who aren't necessarily looking to enrol for a masters degree yet.

UOWD's Certificate of Proficiency is ideal for professionals who are looking to develop skills in a specific technical or practical discipline over a short time scale. Delivered over a period of just 11 weeks, students can study a range of subjects that are offered by our Faculty of Engineering and Information Sciences.

## **Program Highlights**

Advance Your Career	The Certificate of Proficiency will enable you to fast-track your career by developing your skills and knowledge in a certain field, therefore broadening your employment opportunities.				
Progression to Future Master's Degree	<ul> <li>Upon completion of the chosen subject, students are awarded a Certificate of Proficiency and an official academic transcript. This transcript can then be used as credit towards future master's degree.</li> </ul>				
Classes to Fit Around Your Commitments	All Certificates of Proficiency classes are held from 6:00pm - 10:00pm,     Monday to Friday and are designed to fit around work commitments.				
World-Class Faculty	<ul> <li>UOWD's Faculty provide a wealth of academic and professional expertise from across the globe. All full-time professors hold a PhD degree and are active researchers in their specialist field.</li> <li>They also bring vast industry experience from years of practice in their respective disciplines, creating a learning environment that is both grounded in the latest academic theory and applicable to current professional practice.</li> </ul>				
Complete 1 subject of choice	Direct Entry to Master's Degree  Complete the remaining subjects* to qualify for a Master's Degree				

<sup>\*</sup> Number of subjects varies

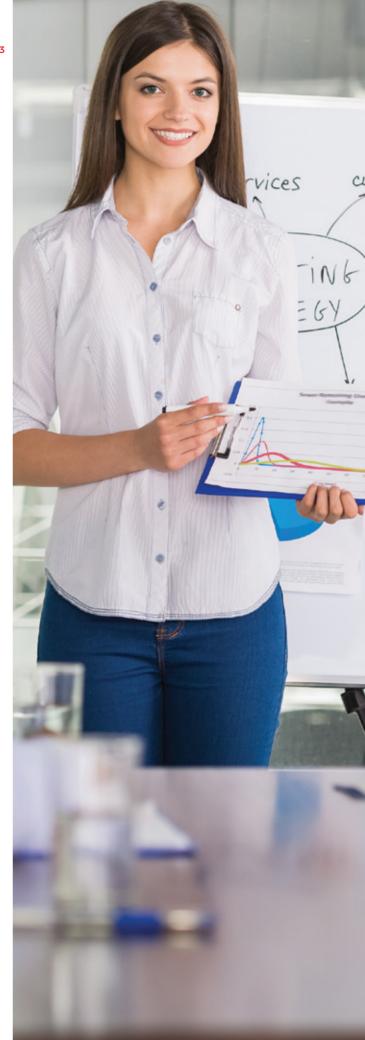
<sup>\*</sup> Credit for Prior Learning may apply

<sup>\*</sup>The number of subjects for the graduate Certificate pathway depends on the COP subject you have taken

You have the option to choose from a selection of subjects, offered by the Faculty of Engineering and Information Sciences. Do note that not all subjects are available throughout the year. Please contact the Faculty Office to discuss your options.

The subjects available are as follows:

- Engineering Project Management
- Financial Management for Engineered Assets
- Life Cycle and Risk Management
- Maintenance Requirement Analysis
- Modelling of Engineering Management Systems
- Project Implementation and Outsourcing
- Strategic Management for Engineers and Technologists
- Systems Reliability Engineering
- Engineering Logistics
- Sustainability for Engineers Scientist and Professionals
- Information Systems and Strategy
- IT Governance
- Data Mining and Knowledge Discovery
- Project and Change Management



## Accreditation and Recognition

Our students and graduates can be assured that our degrees are recognised throughout the UAE and internationally. We are:

- Accredited by the UAE Ministry of Education through the Commission of Academic Accreditation (CAA).
- Quality assured by UOW Australia which is registered with TEQSA, the national regulator of higher education in Australia.

Graduates will be issued a degree from UOW Australia, which is recognised internationally and accredited by the UAE's Ministry of Education.

## **Admission Requirements**

Applicants must have completed a bachelor's degree (or equivalent) at an accredited institution of higher education and have achieved the minimum grades for entry to the program as detailed below

Country	Direct Admission	Probationary Admission* (GPA 2.5-2.99 or equivalent)	Conditional Admission** (GPA 2.0-2.49 or equivalent)
Australia	65%	57%	50%
China	75%	63%	50%
Egypt	65% (Good)	57%	50% (Pass)
	50%	45%	40%
India	10 Point System: 7.0/10.0	10 Point System: 6.0/10.0	10 Point System: 5.0/10.0
	4 Point System: 3.0/4.0	4 Point System: 2.5/4.0	4 Point System :2.0/4.0
Iran	14	13	12
Jordan	70%	60%	50%
Kenya	50%	45%	40%
Lebanon	11	10.5	10
Nigeria	50%	45%	40%
Pakistan	50%	45%	40%
Russia	Average of 4	Average of 3.5	Average of 3
UAE	3	2.5	2
UK	2nd Class Honours with lower division (or min 50%)	45%	Pass (or min 40%)
USA	3	2.5	2

Note: Applicants with a bachelor's degree in the relevant field of study, or its equivalent, with an overall:

All instruction at UOWD is carried out in English and you will need to demonstrate an adequate level of English language proficiency in order to enrol. Please check uowdubai. ac.ae/join-uowd/admission-requirements/masters-degrees for complete admission requirements.

<sup>\*</sup> GPA between 2.5 and 2.99 (on a 4.0 scale) may be conditionally admitted to a master's degree, only if they meet the necessary english language requirement. Such students must take a maximum of 18cp of subjects studied for the master's degree during the period of conditional admission and must achieve an overall WAM of 55 in their first 3 subjects at the University. Students who fail to achieve this standard may have their enrolment discontinued.

<sup>\*\*</sup> GPA between 2.0 and 2.49 (on a 4.0 scale) may be conditionally admitted to a master's degree, only if they meet the necessary english language requirement and they will be required to complete a maximum of 18cp remedial non-credit bearing subjects prior to enrolment in their chosen master's degree. Students must achieve a minimum WAM of 55 in these subjects in order to progress to the master's degree or may have their enrolment discontinued.

## **Program Fees**

The total cost of a master's program is calculated on a per subject basis. Please check uowdubai.ac.ae/join-uowd/fees/masters-degree for a breakdown of fees and further details.

## **Scholarships and Grants**

UOWD provides a range of scholarships which offer financial support to new and existing students at the commencement of each trimester (unless otherwise stated). Whilst it does not cover living and other study-related expenses, it reduces the financial pressure ensuring you enjoy a less stressful student experience.

## **Scholarships**

#### • Academic Merit Scholarship

This scholarship is awarded to applicants based on academic merit and who comply with the necessary requirements. It offers the recipients with a scholarship ranging from 15% to 25% of their tuition fees for the duration of their studies\*.

#### Sports Scholarships - Adam Gilchrist Sports Award

This award, named after Australian cricketer and UOW Brand Ambassador, Mr Adam Gilchrist AM, is awarded to two recipients at either bachelor's or master's level, in the Autumn trimester (which begins in September). It offers the recipients a scholarship of 50% of their tuition fees for the duration of their studies\*.

Read more here: uowdubai.ac.ae/join-uowd/scholarships



#### **Tuition Grants**

UOWD offers a number of grants that provide discounted rates on program fees ranging from 5% to 20% of annual tuition costs\*. Available tuition grants are:

#### • Family Tuition Grants

Immediate family members enrolling simultaneously at UOWD are eligible for tuition fee grants\*.

#### • Alumni Tuition Grants

New or returning students may qualify for one of the following Alumni Tuition Grants. **The Alumni Grant** will be awarded to students who have graduated from a UOWD bachelor or master degree and wish to enrol in a subsequent degree program at UOWD\*\*.

#### The Family of Alumni Tuition

**Grant** is available on annual tuition fees for students who have at least one family member who has graduated from a bachelors or masters program from UOWD only. The Family of Alumni grant is available at the start of every trimester and students must apply for the grant when they submit their Application for Admission form.

<sup>\*\*</sup> Not applicable to UOW Australia graduates

## Step-by-Step Application Process



## Submit your completed application form online or in person

Ensure your application includes the following documents in English:

- Official academic transcripts of your bachelor degree
- · Bachelor degree certificate of completion
- Proof of your English language proficiency
- A copy of your UAE ID card (if applying from within the UAE)
- A copy of your passport (and Residence Visa, if resident of the UAE).
- Proof of two-year work experience i.e letter for employer etc. (MBA candidates only)

Additionally, if you are seeking credit for prior learning in your chosen program please submit to the University the below:

- Certified copies of official academic transcripts showing all courses studied and grades obtained, syllabus details of the courses you successfully completed (including information on course content) and an explanation of the grading system.
- 2 UOWD will notify you of the outcome of your application within two (2) working days
- Clear your conditions as stipulated in your offer letter (if any)
- Return your acceptance agreement and pay your tuition fee

  Return the formal acceptance of the offer (Refer to Attachment 'A' or 'B' of your offer letter)
- Attend enrolment & orientation day
- Commence your studies!

## **Location Map**

### **UOWD Campus**



AL KHAIL METRO STATION

**₫** TO ABUDHABI



#### **Learn More**

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