



Capability Statement

UOW in India

The University of Wollongong (UOW) has partnerships in India that stretch across higher education, government, industry and research organisations.

UOW is strongly positioned to support India to achieve its skills ambitions with research and education collaborations in the areas of 3D bioprinting, transportation, advanced medicine solutions, multifunctional materials, molecular and life sciences, software development, railway engineering, and mining technologies.

As one of Australia's leading teaching and research universities, we attract significant numbers of Indian students to both our Wollongong Campus and the University of Wollongong in Dubai (UOWD).

Indian students form the largest international cohort at UOW. There are over 2,600 Indian student enrolments onshore and offshore (as at December 2022), including at UOWD, as well as in programs at Singapore, Malaysia and Hong Kong. Indian students make up 26 per cent of the University's total international students, with 75 per cent studying degrees in business, engineering or information and communications technology (ICT). Indian students are also the largest international cohort at UOWD, with more than 1,100 enrolments (as at December 2022).

The University brings to India outstanding research in innovative materials and mining and energy, environmental sustainability, human resources, management, logistics, statistics, surveying, infrastructure management, modelling and research, business entrepreneurship and the practice of corporate social responsibility.

Indian corporations are also realising the advantages of setting up Australian operations at the University's Innovation Campus, a 33-hectare research and development beachside precinct close to the Wollongong Campus. The Innovation Campus is home to the iAccelerate Centre, which fosters technology entrepreneurship, start-up development, and commercialisation of new technologies. It is one of the most successful business incubators and accelerators in Australia.

PLANS FOR GIFT CITY

A Letter of Intent was formally signed in July 2022 between UOW and Gujarat International Finance Tec-City (GIFT City) to establish a location for teaching, research and industry engagement in GIFT City within a partnership or on a stand-alone basis.

Initially, the University aims to focus on finance, business and STEM undergraduate programs.

Having a teaching location in Gujarat will further strengthen relationships between the two countries and the sister-state relationship between New South Wales and Gujarat.

RESEARCH AND INDUSTRY LINKS

UOW has worked with the Government of Gujarat as an international knowledge partner in the development of the International Centre of Excellence in Mining Automation and Safety (iCEM) in Gujarat and is actively participating with national institutional partners Pandit Deendayal Petroleum University and the prestigious IIT Kharagpur.

In addition to iCEM, UOW's links with IIT Kharagpur includes joint PhD programs across engineering, technology and health. UOW also has research and teaching links in humanities with other universities in West Bengal, including the University of Burdwan, which has ongoing connections with UOW's English Literature program and is a hub for Australian Studies in India.

UOW's partnership with Indian Institute of Technology (IIT) Bombay focuses on engineering power systems and other allied areas such as battery management and integration of renewables into a SMART grid. UOW's Institute for Superconducting and Electronic Materials (ISEM) is investigating superconductors for low-cost fusion power for a sustainable future, working directly with India's Institute for Plasma Research.

UOW has also been involved with IIT Chennai in robotic welding research. Our School of Computer, Telecommunication and Electrical Engineering has collaborated with world-renowned IIT Madras since 2011.



UOW also has significant collaborations with IIT Dhanbad (Indian School of Mines), Manipal Academy of Higher Education (engineering, medical and health training and research, and student exchange and articulation), Delhi University (student exchange) and IIT Gandhinagar (research and student exchanges).

Partnerships with IIT Delhi, IIT Hyderabad and IIT (BHU) Varanasi comprise research collaborations and staff/student exchanges in, financial mathematics, mining engineering and related disciplines. Other academic research collaborations centred on mining are with Banaras Hindu University and IIT Indian School of Mines, Dhanbad.

The Indian Institute of Science Bangalore and UOW have jointly established an International Association for Coastal Reservoir Research (IACRR), which is dedicated to advancing all aspects of coastal reservoirs and promoting the sustainable development and management of surface water.

UOW has also cemented our partnership with one of India's aspiring universities of the future, O.P. Jindal Global University (JGU), signing an MoU and a student exchange agreement in 2019.

EXPANDING BIOMEDICAL TIES

In 2019, UOW expanded our biomedical ties with India, signing a collaboration with Andhra Pradesh Medtech Zone (AMTZ), to bring our expertise in 3D bioprinting to India's first integrated medical devices manufacturing zone.

Several research and training initiatives primarily focused on 3D biofabrication are being established under the MoU. One of the key collaborative research initiatives being pursued by AMTZ and UOW is a project to develop a scan-and-print package to produce 3D-printed ears. The project will be coupled with innovative programs to support widespread deployment of the technology in both India and Australia.

The 3D-printed ears are one of the latest advances at the Australian Institute for Innovative Materials (AIIM) at UOW. Work here includes customised 3D bioprinters such as the 3D Genii, which prints prosthetic ears.

UOW also collaborates with Chandigarh University for joint research and teaching programs within our Science, Medicine and Health Faculty.

RESEARCH INTO WATER SECURITY

UOW is a founding partner of the Australia India Water Centre (AIWC), a virtual centre to promote water research between Australian and Indian researchers. A consortium of nine Australian and 15 Indian universities and institutes promotes cooperation and collaboration in water research, education, training and capacity building.

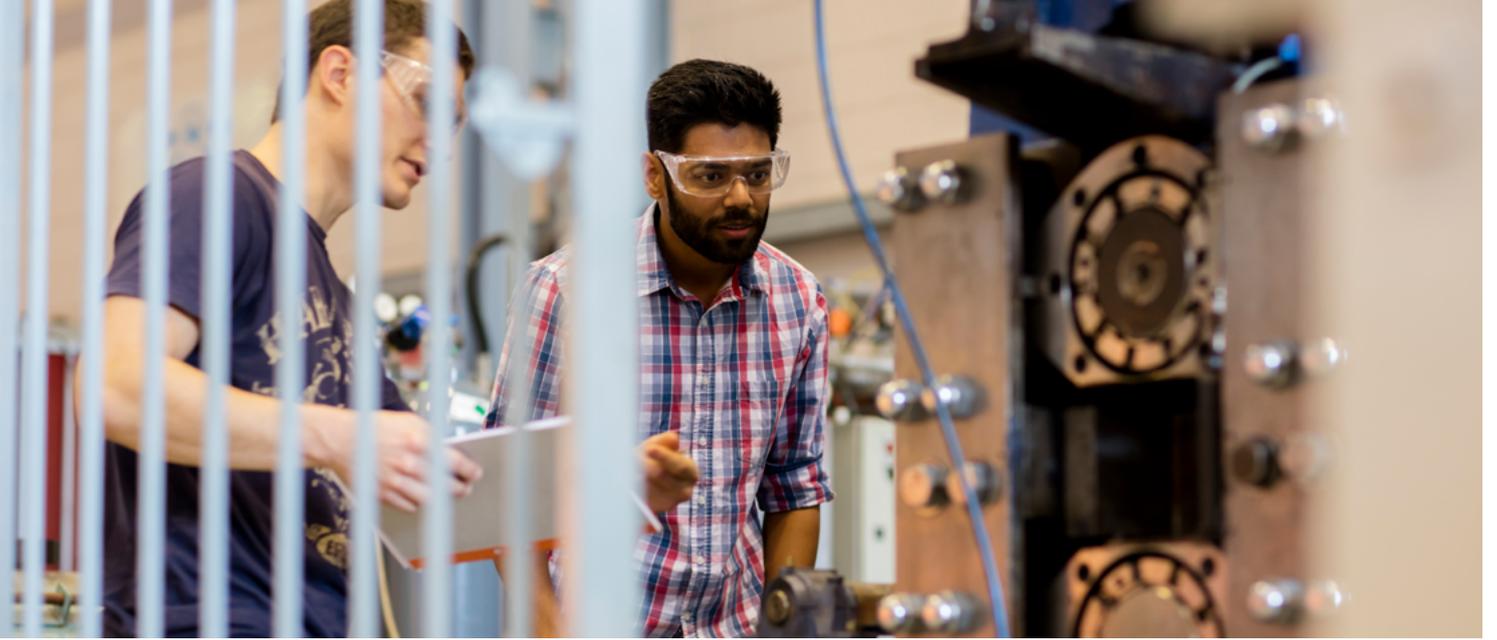
The AIWC provides a platform for long-term partnership between Australian and Indian researchers to work towards a common goal and contribute solutions to the United Nations Sustainable Developmental Goals (SDGs).

Researchers from UOW are also working with local experts in India to investigate coastal reservoirs as a sustainable strategy for water security through the Scheme for Promotion of Academic and Research Collaboration (SPARC). Coastal reservoirs are a new and growing field of research to help combat the effects of water shortages. The scheme aims to improve the research ecosystem of India's higher education institutions by facilitating academic and research collaborations between the country and the best institutions in the world from 25 selected nations.

RAIL INDUSTRY RESEARCH

The Institute of Metro and Rail Technology (IMRT) Hyderabad, India, approached UOW in 2016 regarding possible collaboration in rail industry training and sponsored research. This is aligned with the work being carried out at the Centre for Geomechanics and Railway Engineering (GRE), established at UOW more than a decade ago.

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The GRE team is helping to solve problems in transport infrastructure, with work having already revolutionised the field in terms of design innovations and extended longevity, enabling faster trains carrying heavier loads. GRE researchers conduct large-scale experimental work that practically captures what happens in the field, combining with expertise in predictive computer simulations. The GRE has four current MoUs with Indian Institutes of Technologies (IIT).

The Australian Research Council (ARC) Industrial Transformation Training Centre for Advanced Technologies in Rail Track Infrastructure (ITTC Rail) was opened at UOW in 2018 and brings together rail track infrastructure expertise from all sectors of the rail industry, with eight universities and 11 national and international industry partners taking part.

In September 2019, UOW signed an MoU to establish a mutually beneficial collaboration with the Dedicated Freight Corridor Corporation of India Limited (DFCCIL), paving the way for a wide range of research, teaching and consultation activities.

MINING INTO THE FUTURE

UOW is world-renowned for our experience in mining, which has grown from our links to the Illawarra's strong economic foundations in the sector.

UOW offers a full suite of engineering, information and communications technology (ICT), environmental science, occupational health, and management and business courses both for award, non-award and professional development related to mining. Our School of Civil, Mining and Environmental Engineering (CME) has a world-class reputation for excellence in research, innovative approaches to teaching and learning, and for housing laboratories and workshop facilities that are among the best in Australia.

The International Centre of Excellence in Mining Automation and Safety (iCEM) provides professional development and training for the mining sector, including Masters programs and PhD research, as well as industry-related R&D, workshops and conferences.

INFORMATION TECHNOLOGY

India's IT industry is able to tap into the large pool of career-ready information and communications technology (ICT) graduates from UOW.

Each year, more than 1,000 students complete ICT degrees at UOW, which include computer science, information technology, and business information systems. Many of these graduates complete a major in cybersecurity, taught by UOW experts and world-class researchers.

Wollongong is home to a significant number of technology-based companies, many of which were established by UOW graduates. Wollongong has attracted a number of multinational and national companies, and the University has links with major players in India's IT industry, including Infosys, Mindtree and Tata Consulting.

UOW also has an existing agreement with WIPRO Infotech for academic research and partnership in IT services. WIPRO specialises in cognitive computing, hyper-automation, robotics, cloud, analytics and emerging technologies.

PROFESSIONAL DEVELOPMENT AND CULTURAL RELATIONS

Academics at UOW are leaders in their field, providing governments and international corporations with customised staff education programs.

Customised masterclasses include: energy and environment; leadership and business management; public administration; asset management; manufacturing and infrastructure; teacher training for higher education; health and safety; and public policy.

Cultural relations have also been strengthened with the signing of an MoU between UOW and the Indian Council for Cultural Relations (ICCR) for an ICCR Chair of Indian Studies. The MoU facilitates for the Chair to conduct workshops on various topics of interest to be delivered at UOW's Sydney Business School.

GLOBAL LEARNING OPPORTUNITIES

UOW offers global learning opportunities to high-achieving graduate students from the Institute of Finance and International Management (IFIM) Business School in Bangalore, presenting scholarships to enable recipients to travel to Australia and study postgraduate business subjects for two trimesters at UOW's Sydney or Wollongong campuses.

UOW's Business School is recognised among leading business schools in the world, having achieved AACSB International accreditation, awarded only to the top 5 per cent of business schools globally.

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SPORT BRINGS COUNTRIES TOGETHER

Former Australian cricket captain Adam Gilchrist AM has close relationships with India due to his exceptional career in cricket and in his ongoing role as UOW's Global Brand Ambassador since 2008.

"India has a lot of potential and with so many aspirational Indian students, it makes perfect sense to have a world-class institution like UOW to be part of their journey and provide the right skills and programs to develop their careers," he says.

UOW WELCOMES THE OPPORTUNITY TO WORK WITH GOVERNMENT AND INDUSTRY PARTNERS TO DELIVER EXCEPTIONAL OUTCOMES

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