


**Celebrating  
10 years of  
purpose in  
action**



**UNIVERSITY  
OF WOLLONGONG  
AUSTRALIA**

**/INNOVATION  
CAMPUS**



We believe  
that by working  
together we can  
solve many of the  
challenges facing  
the world today

## A message from the Vice-Chancellor and Principal

In 2016, the University of Wollongong's Innovation Campus marks its 10th anniversary.

There has been remarkable achievement and growth since construction of the campus began in 2006 and in this 10th year we celebrate the innovative research and business successes that have been borne from it.

“

**The anniversary is also a time for us to celebrate that the Innovation Campus has been developed from strong government and community support.**

The Innovation Campus is an award-winning research, development and business precinct which helps drive the growth of the Illawarra's innovation and technology ecosystem. It has received many accolades over the past decade. Most recently, it took out the Emerging Research Park Award at the Association of University Research Parks 2016 awards in Oklahoma in the United States (see Page 33).

Although relatively young, the Innovation Campus is constantly evolving to stay at the forefront of an ever-changing world. Future focus is planned around health and wellbeing; innovative manufacturing; sustainability; innovation; and ICT and finance.

The anniversary is also a time for us to celebrate that the Innovation Campus has been developed from strong government and community support. This support has been unwavering ever since former University Vice-Chancellor Professor Gerard Sutton AO contacted the Wollongong Sportsground Trust in 1999 to explore the possibility of Brandon Park – the former home ground of the Wollongong Wolves FC – being transferred to the University. Wollongong Sportsground Trust relinquished control of Brandon Park in 2001 and in February 2002 Cabinet endorsement and funding approval for the Innovation Campus was given. Stage 1 of the Campus started on November 24, 2006 and on June 27, 2008 the Innovation Campus was opened at the newly completed \$32 million The Central.

For more than 40 years, the University has been an anchor for the Illawarra's economy, providing for the transition to new industries and new jobs. The University is a leader in innovation with local and global impact and we continue to be an active partner in growing Wollongong to reach its full potential as a vibrant, prosperous and globally competitive city. The Innovation Campus is a key component to this commitment.

The anniversary celebrations highlight the developments at our research institutes and commercial partnerships on the Innovation Campus and this commemorative brochure marking the occasion takes a look inside the buildings – at the people, the great ideas and the results. It also shows how the campus has developed, retracing from when the site was a migrant arrival centre in the 1950s, through to the opening of the iAccelerate Centre in 2016.

This brochure also highlights the opportunities the Innovation Campus offers to organisations and individuals. I invite you to not only read about it, but to also take a look through the site. See how the future is being created right here in Wollongong.



**PROFESSOR PAUL WELLINGS CBE**  
University of Wollongong  
Vice-Chancellor and Principal

## A message from the UOW Brand Ambassador



“

**The Innovation Campus is a nexus in strengthening the business, education and research ties Australia has locally and globally.**

I am proud to be involved in the celebrations for the 10th anniversary of the University of Wollongong's Innovation Campus. The anniversary provides a great opportunity for businesses, entrepreneurs, the university and the general public to celebrate innovation and entrepreneurship in the region.

For the past eight years I have served as the University's Brand Ambassador and in that time I have been closely involved in the development of the Innovation Campus. Last year, I was appointed as the first Australia-India Education Ambassador.

I have seen how higher education is not just about academics and research, but also the need to connect to business and industry to make a difference. The Innovation Campus is a nexus in strengthening the business, education and research ties Australia has locally and globally. Having spent so much of my cricketering career playing in India, I have a good understanding, in particular, of the important bond India and Australia have.

During my time as UOW Brand Ambassador, I have enthusiastically promoted the opportunities available at the Innovation Campus within Australia and internationally. My discussions are always centred around partnerships, the connections we make, the ideas shared and the fact that the Illawarra is an innovative region which is an appealing and cost-effective business location.

It's the partnerships the University is establishing through the campus that is helping to drive the spirit of wanting to make a difference. The Illawarra is an innovative region that enables businesses to grow and scale and the Innovation Campus is helping the region reach its full potential by retaining the University's high quality graduates and making the region a destination for innovators and investors.

In the past decade, the campus has steadily grown into a well-established community of innovative companies and research precincts and this year has seen major developments in the opening of the iAccelerate Centre building and NEC Australia opening its new corporate office.

I look forward to seeing the campus continue to evolve.

I look forward to a brilliant tomorrow.

A handwritten signature in black ink, reading 'Adam Gilchrist'.

**ADAM GILCHRIST AM**  
UOW Brand Ambassador



# Purpose in action

We believe in supporting organisations, individuals and our region to realise their purpose and ambitions faster by connecting to an ideas network dedicated to global impact. The Innovation Campus helps to shift Wollongong to an ideas-based economy by providing new jobs and embracing new industries.





### At the forefront of an ever-changing world

The Innovation Campus is a 33 hectare beachside research, development and commercial precinct established by the University of Wollongong to drive partnerships and collaboration between academia and business communities by co-locating commercial and research organisations in state-of-the-art facilities.

The Innovation Campus has helped to advance research in “intelligent” innovative materials with the potential to regenerate damaged human nerves, the development of superconductors that make energy transmission more efficient, new techniques for sustainable building design, maritime law and security, and innovative approaches to health services delivery and policy.

The Innovation Campus is a place of knowledge that brings significant economic and social benefits to Wollongong and enhances the region’s competitive edge in the marketplace. We stay at the forefront of an ever-changing world.



### From football field and migrant hostel to campus

The Innovation Campus sits on the sites which once were the Balgownie Migrant Workers’ Hostel, Fairy Meadow Migrant Hostel and Brandon Park. Brandon Park was the home ground of the Wollongong Wolves FC and in 2001 the park was formally transferred from the Wollongong Sportsground Trust to the University of Wollongong.

The University of Wollongong is a research-intensive university which brings communities from around the world together in discovery, innovation and commerce. The Innovation Campus was developed to interact not only with UOW’s main campus, but also with the commercial realities and imperatives of a growing and fast-paced economy.



### Overwhelming support

The Innovation Campus has enjoyed strong and ongoing support at all government levels. A key aspect of support has been the Advantage Wollongong partnership between Wollongong City Council, the University and the NSW Department of Industry to promote Wollongong as a superior business location.

At the opening of the Innovation Campus in June 2008, the then UOW Vice-Chancellor Professor Gerard Sutton AO said: “The Innovation Campus is opening today because the three arms of government – local, state and national – have been able to work co-operatively. Support from the wider community has been crucial and overwhelming.”



### Making a difference

The Innovation Campus is a junction for national and international companies, researchers and students to meet and translate products to commercial success nationally and internationally. It has a well-established community of innovative companies that have steadily grown over the past decade.

One of the University of Wollongong’s goals is to work with our partners to create greater levels of innovation and impact, and contribute to the creation of new enterprises.



### Our people

We believe that innovation comes down to people and great ideas. While others are focused on their facilities, we are focused on the people inside them.

We are committed to the people that live, work and play on the Innovation Campus, their ambitions, their focus and their sense of place.



### Business advantage at competitive price

The Innovation Campus gives businesses the edge to succeed and is an attractive alternative to the high costs of setting up in Sydney. The advantages of being based at the Campus include:

- Access to UOW networks to open up new opportunities
- Becoming part of an ideas ecosystem that stimulates a progressive culture
- Collaboration with research to drive business differentiation and success
- High quality and affordable graduate workforce
- Less staff turnover and easy to attract staff due to outstanding lifestyle
- A stimulating environment that encourages collaboration and connection
- A team dedicated to supporting the tenants and growing the campus.



# Constantly evolving

The Innovation Campus was established during a time of new investment, growth and research focus at the University. Ten years after the first sod was turned, the Innovation Campus now begins a new era with a refreshed brand identity revealed. This captures the contribution we make to business, UOW and the Illawarra through our impact and results.

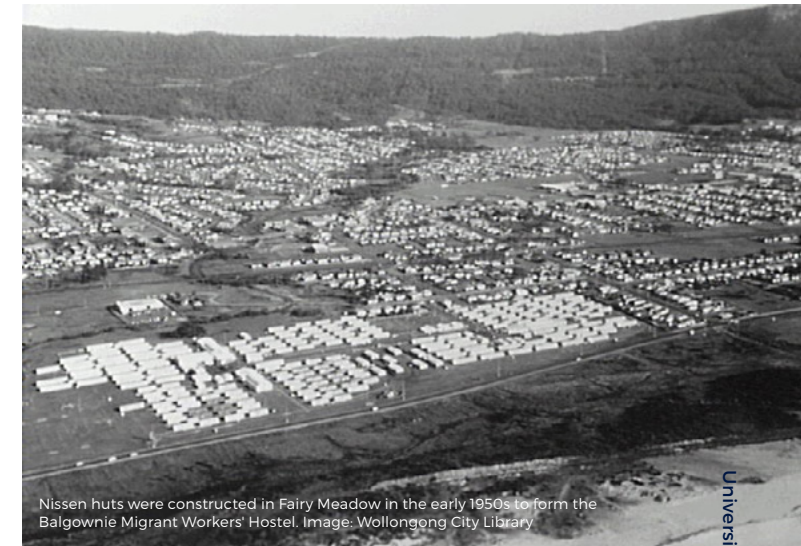
“

**The Wollongong Innovation Campus won't be just another business park. It will be an outstanding high-tech research and education precinct linked to one of the nation's most innovative universities.**

**THEN NSW PREMIER BOB CARR, 2002**



In 2004-05, the University restored one Nissen Hut and two Quonset huts on the site. Two of the huts were relocated from a flood-prone location to their present location.



Nissen huts were constructed in Fairy Meadow in the early 1950s to form the Balgownie Migrant Workers' Hostel. Image: Wollongong City Library

The Innovation Campus sits on the sites which once were the Balgownie Migrant Workers' Hostel, Fairy Meadow Migrant Hostel and Brandon Park.

In the early 1950s, there were a number of migrant hostels built to house migrant workers who had emigrated to Australia. Three such hostels were built in the Illawarra at Unanderra, Berkeley and the Balgownie Migrant Workers' Hostel at Fairy Meadow.

Since the closure of the hostel in 1982, the buildings have been adapted for use by the University of Wollongong. Three huts were conserved in 2005 and today one continues to be used for child-care on the Campus.

Brandon Park was the home ground of the Wollongong Wolves FC and in 2001 the park was formally transferred from the Wollongong Sportsground Trust to the University of Wollongong.

The history of the Innovation Campus starts long before the first sod was turned on November 24, 2006. Following the official campus opening in June 2008, then UOW Vice-Chancellor Professor Gerard Sutton AO wrote: "It all started with a gleam in the eye back in 2000 when the Wollongong Sportsground Trust contemplated options for the land that was then a football ground. It was the University as an ideal candidate to turn this valuable land into something that could provide long-term benefits to the regional economy."

99

Brandon Park was the home ground of the Wollongong Wolves Football Club.



“

**It was the University as an ideal candidate to turn this valuable land into something that could provide long-term benefits to the regional economy.**

**PROFESSOR GERARD SUTTON AO**  
Former UOW Vice-Chancellor

## 1999

Former University Vice-Chancellor Professor Gerard Sutton AO contacts the Wollongong Sportsground Trust in August to explore the possibility of Brandon Park being transferred to the University for regional development purposes.

## 2000

With support from the NSW Government, the Science Centre and Planetarium is rebuilt after severe flooding in 1998.

**December:** Acting Premier Dr Andrew Refshauge announces in Wollongong that the NSW Government will enter into formal discussions with the University and other stakeholders to progress the concept of a technology precinct.



## 2001

**April:** Wollongong Sportsground Trust formally resolves to advise the Minister for Sport and Recreation of intention to relinquish control of Brandon Park.

## 2002

**February:** NSW Cabinet endorsement and funding approval for the Innovation Campus.

**March:** Then NSW Premier Bob Carr arrives in Wollongong to announce a down payment of \$16 million in seed funding for the Innovation Campus, with the NSW Government to invest \$24 million to create the new technology precinct. "The Wollongong Innovation Campus won't be just another business park," Mr Carr says during the visit. "It will be an outstanding high-tech research and education precinct linked to one of the nation's most innovative universities."

02



Then Vice-Chancellor Gerard Sutton AO and then Chief Executive of Baulderstone Hornibrook Liam Forde.

## 2003

**January:** Joint venture partners UOW and Baulderstone Hornibrook sign contracts for the \$300 million project to be built over the next 10-15 years. Liam Forde, Chief Executive of Baulderstone Hornibrook, says: "We see a natural alliance between the University's strong reputation and leadership position and our own experience in regional development. We both share similar values, based on mutual trust and transparency, and this creates a unique opportunity in itself to deliver innovation".

Master Plan approved by Wollongong council. The plan provides for research, innovation and office space as well as retail and service facilities, child care, a hotel and conference centre and residential accommodation.



Campus East is built on the site which was once the Balgownie Migrant Workers' Hostel.

## 2005

**May:** Development application lodged for central facilities building. (now The Central). In March, an article in The Australian newspaper describes The Central building: "The design features a sweeping roof line reminiscent of the wing spans of the hang gliders that soar on the updrafts of ocean winds at Bald Hill. Those hang gliders are a symbol of the city's history that led to Wollongong assuming the title of Australia's City of Innovation in 1999. This title reflects a history of innovative research and development that dates back to Lawrence Hargrave's pioneering flight experiments in the same updrafts at Stanwell Park in 1894 and continued though the 20th century as the city became one of Australia's industrial powerhouses. It is this reputation for innovation and its record for collaborative research and partnerships with corporations and government that is driving the development of the Innovation Campus."

**August:** Then UOW Chancellor Mr Michael Codd, AC, officially opens the \$15 million student accommodation facilities at Campus East alongside the Innovation Campus.

## 2006

**May:** Then Federal Minister for Education, Science and Training Julie Bishop announces \$12 million in government funding to establish a Global Centre of Excellence for Transnational Crime Prevention. Ms Bishop says the centre is a "fine example of what I believe is the future for Australian universities". "Australian universities have to differentiate themselves, and those that can play to their strengths and be the best at what they do will flourish," she says. "The University of Wollongong is showcasing innovation and research that will have an impact on the Asia-Pacific region. When we see research integrated with teaching and scholarship in such a vital area as transnational crime prevention, then we are certainly seeing a university that is playing to its strengths."



**November:** Site infrastructure works for stage 1, including The Central, begin. Then NSW Minister for Regional Development and Minister for the Illawarra David Campbell, former Innovation Campus director David Fuller and University of Wollongong Chancellor Michael Codd AC inspected the site, signalling the start of construction on the campus.

06





## 2007

**May:** Construction of the Australian Institute of Innovative Materials building begins. (Originally called the Institute of Future Materials).

**November:** Then Minister for the Illawarra David Campbell and Member for Wollongong Noreen Hay announce a joint education initiative involving UOW and TAFE NSW which will deliver a \$20 million Multimedia and Design Training Centre at the Innovation Campus. The State Government commits \$4.8 million to the new facility which will provide specialised recording and stage areas, computer laboratories, seminar rooms and multimedia and design facilities.

Construction starts on the Institute for Transnational and Maritime Security.

## 2008

**June:** Then NSW Premier Morris Iemma, with Minister for the Illawarra David Campbell, officially opens the Innovation Campus at the completed \$32 million The Central in front of more than 300 guests. UOW Vice-Chancellor Professor Gerard Sutton AO remarks: "The City of Innovation now has its Innovation Campus, and the future is ours." Also, on the day, Professor Sutton acknowledged previous NSW Premier Bob Carr, his Treasurer Michael Egan and MPs David Campbell and Colin Markham, along with Alexander Downer, former Wollongong City Council general manager Rod Oxley and then Innovation Campus director David Fuller. "The Innovation Campus is opening today because the three arms of government – local, state and national – have been able to work co-operatively. Support from the wider community has been crucial and overwhelming." Professor Sutton also declares that the Innovation Campus "would become the engine that drives the Illawarra economy".

Mr Iemma's comments included: "The NSW Government has been delighted to work with the University to help this project become a reality. The Innovation Campus represents a brighter, stronger future for Wollongong, the Illawarra and all of NSW. It places Wollongong at the centre of our knowledge economy. This is how it should work – government, business and academia forming a partnership in an innovation campus. Our future economic prosperity lies in our minds and this Innovation Campus places Wollongong at the centre of the knowledge economy and the future of Australia."

Human resource consultancy and recruitment business The DMW Group become the first tenants at The Central.

**November:** The Institute for Transnational and Maritime Security (ITAMS) completed and handed over for occupation by its chief university tenants – the Global Centre for Transnational Crime Prevention (CTCP) and the Australian National Centre for Ocean Resources and Security (ANCORS).



Pictured at the opening of The Central at the Innovation Campus (from left): Former Baulderstone Hornibrook managing director Rick Turchini, then NSW Premier Morris Iemma, then Member for Shellharbour Lylea McMahon, former UOW Vice-Chancellor Professor Gerard Sutton AO, former Minister for Police and Minister for the Illawarra David Campbell, and then UOW Chancellor Michael Codd AC and Innovation Campus Director David Fuller.

“

**Our future economic prosperity lies in our minds and this Innovation Campus places Wollongong at the centre of the knowledge economy and the future of Australia.**

**MORRIS IEMMA**  
NSW Premier, 2008



## 2009

**March:** Then Federal Minister for Innovation, Industry, Science and Research Senator Kim Carr officially opens the AIIM building, saying the University is "leading the way in developing the sort of collaborative partnerships that we'd like to see across the Australian University sector". Then Australian Research Council Chief Executive Officer and former UOW Deputy Vice-Chancellor (Research), Professor Margaret Sheil is also welcomed to the opening, attended by about 200 guests. Senator Carr says "The Australian Institute for Innovative Materials addresses one of the critical challenges facing us today – the challenge of building sustainable growth in a rapidly changing world. They (the two research institutes of IPRI and ACES) are developing high-skilled, high-wage jobs for the future that will keep Wollongong as a manufacturing hub well into the future. We can't afford to stop thinking of the future – the UOW is doing that."

**May:** UOW receives \$43.8 million in Federal Government Budget funding towards the \$88.9 million AIIM P&D precinct.

The free Gong Shuttle bus service, a NSW Government initiative starts, linking the Innovation Camps with Wollongong CBD, Wollongong railway station, hospital and main UOW campus.



Then Federal Minister for Innovation, Industry, Science and Research Senator Kim Carr officially opens the AIIM building.



## 2010

**August:** Thérèse Rein, wife of former Prime Minister Kevin Rudd, officially opens the \$20 million Mike Codd Building which houses UOW's Sydney Business School and a Digital Media Centre that is a partnership between UOW and the TAFE Illawarra Institute. Then UOW Vice-Chancellor Professor Gerard Sutton AO said it was fitting that a building named after Mr Codd be located on the Innovation Campus because, as Chancellor, he had played a critical role in the early development of the Innovation Campus. Mr Codd AC, a former head of the Department of Prime Minister and Cabinet, served three terms as UOW's Chancellor from 1997-2009. He also worked closely with Ms Rein as board member and chair of her highly successful international employment and training organisation, the Ingeus Group of Companies. Ms Rein says she hopes that students who study in the Mike



Thérèse Rein and former UOW Chancellor Mike Codd AC.

Codd Building would "walk away with some of Mike's characteristics" such as honesty and wisdom, the ability to remain calm and rational, the skill to bring out the best in people and the optimism and belief that the world can be a better place.



## 2011

**May:** The Innovation Campus is named the best new business and industrial park in Australia at the Property Council of Australia Innovation and Excellence Awards. UOW Vice-Principal (Administration) Chris Grange says the award recognised the quality of what the Innovation Campus offers to tenants, and would help the University market the campus to potential international partners looking to establish operations in Australia.

**September:** Then NSW Premier Barry O'Farrell says the University of Wollongong's Innovation Campus is a key to the diversification of the Illawarra regional economy during a visit to open the campus' \$40 million commercial building, Enterprise 1. Mr O'Farrell says: "It's not surprising that successive state governments would stand beside the University of Wollongong. What you are doing here (at the Innovation Campus) is critical to a region with many strengths." Mr O'Farrell draws an analogy with Star Trek at the opening. Joking with the audience that his son had been most impressed to learn that his father would be coming



Chris Evans tours the building, and below, at the opening with UOW Chancellor Jillian Broadbent AO.



to Wollongong to open the Enterprise (also the name of the starship in the iconic space television series of the 1960s and '70s), the Premier says: "The fact is universities do seek to discover and explore new worlds – and that's where our economy has to reach ... to explore them and conquer them for the public benefit."

**October:** The AIIM building is awarded the 2011 Australian Timber Design Awards People Choice award.



## 2012

**October:** Then Minister for Tertiary Education, Skills, Science and Research, Senator Chris Evans, officially opens the Australian Institute for Innovative Materials (AIIM) Processing and Devices facility. The new building, chiefly funded through a \$43.8 million grant from the Federal Government's Education Investment Fund as part of the Nation-building Economics Stimulus Plan, has been constructed as an extension to the existing AIIM building. The facility is for researchers to develop their processes and devices and test them for real-world applications. The Minister says the work being carried out at AIIM is playing an important role in bridging the gap between research and industry, and would generate significant economic activity and employment opportunities for the Illawarra region. "This building adds another component to the Innovation Campus and its world-leading research," Senator Evans says.

"This campus is turning into one of the best innovation centres in Australia ... and is world competitive." UOW Vice-Chancellor Professor Paul Wellings CBE thanks Senator Evans and says it is appropriate that the building has been financed through the economic stimulus program. "AIIM's researchers are carrying out important nation-building work in a range of fields, from energy generation and storage including next generation solar cells, new battery technologies for more efficient electric vehicles and thermoelectric modules for converting waste energy into electricity, through to advanced medical bionics," Professor Wellings says. "In short, they are dealing with some of the great challenges of the 21st century, searching for materials breakthroughs that will improve the productivity of existing industries and help to create new ones."

“

**This campus is turning into one of the best innovation centres in Australia... and is world competitive.**

**SENATOR CHRIS EVANS**  
Minister for Tertiary Education, Skills, Science and Research, 2012





## 2013

**August:** Team UOW Australia is announced as the winner of the Solar Decathlon China 2013 for its net-zero energy house of the future, the Illawarra Flame. The first ever Australian team to be invited to compete in the 'energy Olympics', Team UOW Australia - a partnerships between the University of Wollongong and TAFE Illawarra - is awarded first place with 957.6 of a possible 1000 points (the highest score awarded in any Solar Decathlon competition). Team UOW Australia places first in Engineering, Architecture and Solar Application and second in Communications and in Market Appeal. Giving it the winning edge that led to its first place finish, Team UOW Australia's entry is the first house in Solar Decathlon history to demonstrate a retrofit of an existing home. Modelled on the iconic 1960s Aussie fibro house, the Illawarra Flame demonstrates how to make existing houses energy efficient and comfortable to live in. The winning house is now on permanent display at the Innovation Campus.

## 2014

**August:** Senator the Hon Eric Abetz, Leader of the Government in the Senate, Minister for Employment and Minister Assisting the Prime Minister for the Public Service, opens the SBRC building. The SBRC was made possible through a Federal Government contribution of \$25.1 million from the Education Investment Fund. At the opening, Senator Abetz says: "This is a project that I have no doubt will be seen as a quality long-term investment for jobs and for the environment. It will help create employment and enhance our international reputation." He adds that the building is another example of UOW's "practical research, relevant research" that is helping to transform the region. "This is a textbook example of a region remaking itself, responding to challenges and changing times. And UOW has been at the centre of that transformation." SBRC Director Professor Paul Cooper says the centre is an example of how Federal Government funding had delivered more than bricks and mortar and had enabled a hub where academia, industry and the community could work together to bring innovative ideas to life. "One of the great challenges today is the rising cost of energy. The applied research we are undertaking will improve the design and efficiency of buildings, leading to improved quality of life and reduced cost of living," Professor Cooper says.



**April:** A new \$5.5 million bridge linking the Innovation Campus with Squires Way and Montague Street in North Wollongong is officially opened by UOW Vice-Chancellor Professor Paul Wellings CBE and Wollongong City Council Lord Mayor Gordon Bradbery, providing a vital transport connection to the growing campus and surrounding area.

**November:** Leading global technology solutions and services company NEC Australia signs an agreement with UOW that will trigger an investment of \$25 million in the region and the creation of more than 100 jobs.

“

**This is a textbook example of a region remaking itself, responding to challenges and changing times.**

**SENATOR THE HON ERIC ABETZ**  
Leader of the Government in the Senate,  
Minister for Employment and Minister  
Assisting the Prime Minister for the  
Public Service, 2014



# 16



## 2016

**July:** The iAccelerate Centre is officially opened by NSW Minister for Industry, Resources and Energy the Hon. Anthony Roberts MP. It is the first of its kind in Australia and is the Illawarra's purpose-built business incubator and accelerator. At the opening, Minister Roberts says: "I applaud the University for moving quickly to bring this exciting project to fruition providing an environment where start-ups can flourish and businesses can grow. With the opening of the iAccelerate Centre, the University is making a significant investment in further developing the innovation ecosystem in the Illawarra and helping the region to adapt and thrive in an ever-changing, globalised future." UOW Vice-Chancellor Professor Paul Wellings CBE says the iAccelerate Centre would capture the intellectual capital of the Illawarra by retaining the University's high-quality graduates while making the Illawarra a destination for innovators and investors. "The Illawarra has the potential to be transformed from a manufacturing-based region to an international innovation hub with new industries," Professor Wellings says.

**September:** The University of Wollongong Innovation Campus receives the international 2016 Emerging Research Park award from the Association of University Research Parks, an international body dedicated to fostering innovation and economic growth in the global economy through university, industry and government partnerships.



# People + great ideas

The Innovation Campus is home to a number of the University of Wollongong's leading research institutes working in the development of "intelligent" innovative materials with the potential to regenerate damaged human nerves, the development of superconductors that make energy transmission more efficient, new techniques for

sustainable building design, maritime law and security, and innovative approaches to health services delivery and policy.

Where others focus on their facilities, we're focused on the people inside them and their great ideas. So, let's take a look at the people and ideas inside these buildings...



Professor Geoff Spinks with a handheld surgical 'pen' that prints human stem cells.

## AIIM

The Australian Institute for Innovative Materials (AIIM) is a purpose-built facility to help transform multi-functional materials research into commercial reality.

Inside, there are three research organisations and a microscopy facility which are:

- Intelligent Polymer Research Institute (IPRI)
- Australian Research Council Centre of Excellence for Electromaterials Science (ACES)
- Institute for Superconducting and Electronic Materials (ISEM)
- University of Wollongong Electron Microscopy Centre (EMC)
- Australian National Fabrication Facility (ANFF)

The multidisciplinary focus of research at AIIM brings together biologists, clinicians, chemists, physicists, engineers and materials scientists to develop and explore new materials, their application, production and commercialisation.

IPRI is the lead node of the Australian Research Council Centre of Excellence for Electromaterials Sciences (ACES). Professor Gordon Wallace and his

team at IPRI are recognised internationally as world leaders in the development of "intelligent" materials and nanotechnology. Exciting new developments happening here include renewable energy (plastic solar cells, lightweight batteries and electronic textiles), sustainable industries (advances in the recovery of precious metals and new corrosion protection technologies) and medical science (nerve and muscle regeneration and cell communications).

ISEM, led by Professor Shi Xue Dou, works to advance technologies including batteries for electric vehicles and energy storage; applied superconductivity for electrical and medical devices; energy conversion and transmission; spintronic and electronic materials for applications; terahertz science; and nano-structured materials.

EMC, headed by Professor Elena Pereloma, is dedicated to providing quality electron and conventional microscopy-based solution to UOW's research groups in the Physical and Life Sciences, Engineering and Nanotechnology.





The Sustainable Research Centre is the only building in the world that is a living laboratory.

## SBRC

The Sustainable Buildings Research Centre (SBRC), headed by founder Professor Paul Cooper, is a multi-disciplinary facility that brings together a wide range of researchers to holistically address the challenges of making our buildings sustainable and effective places in which to live and work. The centre's mission is to assist in the rapid decarbonisation of our built environment, with the focus being on the retrofitting of existing buildings. The SBRC brings together research, students and industry to:

- Develop, prototype and test sustainable residential and commercial building technologies.
- Perform experimental and theoretical analysis of the thermal design of buildings.
- Develop architectural and structural design tools to facilitate the inclusion of ecological costing throughout the design phase of buildings.
- Investigate day-to-day behaviour of building occupants to improve effectiveness of building use.

- Develop control systems and sensor technology for improving building performance.

The SBRC building has many environmentally-friendly features which showcase the type of research being conducted there. Its environmentally-friendly features include ultra-low energy consumption, a solar roof that produces more power than the building uses, rainwater harvesting to ensure the building has a net-zero water usage, sophisticated natural ventilation and extensive monitoring and building control systems to ensure it operates as efficiently as possible. In 2015, SBRC was awarded a 6-star Green Star by the Green Building Council of Australia. It is the first certified 6-star Green Star building in the Illawarra. It is the only building in the world that is a living laboratory.





## The iAccelerate Centre

The University of Wollongong's iAccelerate Centre – the Illawarra's purpose-built business incubator and accelerator – is the most recent addition to the University's Innovation Campus, having opened in July this year. The iAccelerate initiative has already assisted 65 businesses and created 143 start-ups jobs, with the ambition to create 500 direct and 1000 indirect jobs, attracting \$70 million in investment to the regional and state economies by the end of the decade.

The iAccelerate Centre supports students, staff and the greater Illawarra community by offering practical and engaging programs to help build businesses fast with a focus on mentorship, entrepreneurship workshops and seed funding. The two-stream iAccelerate program is the first of its kind in Australia.

One of those to have benefitted from the productive environment is University of Wollongong graduate and now CEO of The Safety Compass Adam Poole. He was able to turn his innovative idea into reality and has returned to Wollongong to develop his business further at the iAccelerate Centre. Mr Poole developed The

Safety Compass app which makes thousands of pages of information available on a construction site by holding up a smartphone. This improves health and safety on construction sites and other workplaces at the touch of a button.

"I'm from Wollongong and the app was born here," he says. "iAccelerate is a great place for us to establish a company base and utilise the iAccelerate expertise in growing our product from Wollongong."







## ITAMS

The Institute for Transnational and Maritime Security (ITAMS) is an intensive teaching and research facility that is home to the University's Australian National Centre for Ocean Resources and Security (ANCORS). ITAMS' research is applied and is primarily designed to assist governments and international institutions to develop appropriate cost effective policies to address complex issues associated with oceans management.

The Australian National Centre for Ocean Research and Security (ANCORS) is Australia's only multidisciplinary university-based centre dedicated to research, education and training on ocean law. The centre plays a key role globally in international ocean management, focusing on areas including maritime security, offshore jurisdiction and enforcement, ocean law, fisheries and management and the protection of the marine environment.

ANCORS research informs policymakers and contributes to real-world outcomes. Since its establishment in 1994, ANCORS has run regular

specialist courses for navies, coastguards, policymakers and managers from maritime nations across the Asia-Pacific, Africa, the Caribbean and Latin America. It also provides consultancy services to many governments on a range of ocean law, policy and management issues, management of ocean resources and policy advice on maritime security, ship safety and marine pollution.

ANCORS Director of Research Professor Clive Schofield is at the forefront of the geographical and legal issues that play out across the world's waters. Professor Schofield was one of only two academics in the world asked to serve as independent expert witnesses in a 2015 case to rule on maritime disputes in the South China Sea between The Republic of the Philippines and The People's Republic of China. The hearing was before an arbitration tribunal constituted under the United Nations Convention on the Law of the Sea (UNCLOS) and was held at the Permanent Court of Arbitration in the Netherlands.

## The Central

The Central is the central services hub for the Innovation Campus, and the natural meeting place for people working in research institutes and commercial offices. It offers meeting, conference and function facilities, café and a gym/health club.

The spectacular glass and steel building was the first building completed on the Innovation Campus and opened in June 2008.

## Mike Codd Building

The Mike Codd Building is home to the Digital Media Centre along with campus administration, security and facilities management offices and HDR students.

The building as named after Michael Codd AC, who as UOW's Chancellor from 1997-2009, played an influential role in guiding the early development of the Innovation Campus.

## Enterprise 1

Enterprise 1 is the showpiece commercial office building on the Innovation Campus. The \$40 million building was opened by former NSW Premier Barry O'Farrell in 2011 and provides approximately 10,000 square metres of high quality commercial office space for leading national and international corporations as well as key UOW research institutes.

Tenants include international technology companies TeleCommunications Systems Inc and Tickets.com, South32 Illawarra Coal, Joy Global, Cancer Council NSW, Servcorp, AMP Advice, NEC Australia, and UOW public health research institute the Australian Health Services Research Institute.



## Science Centre and Planetarium

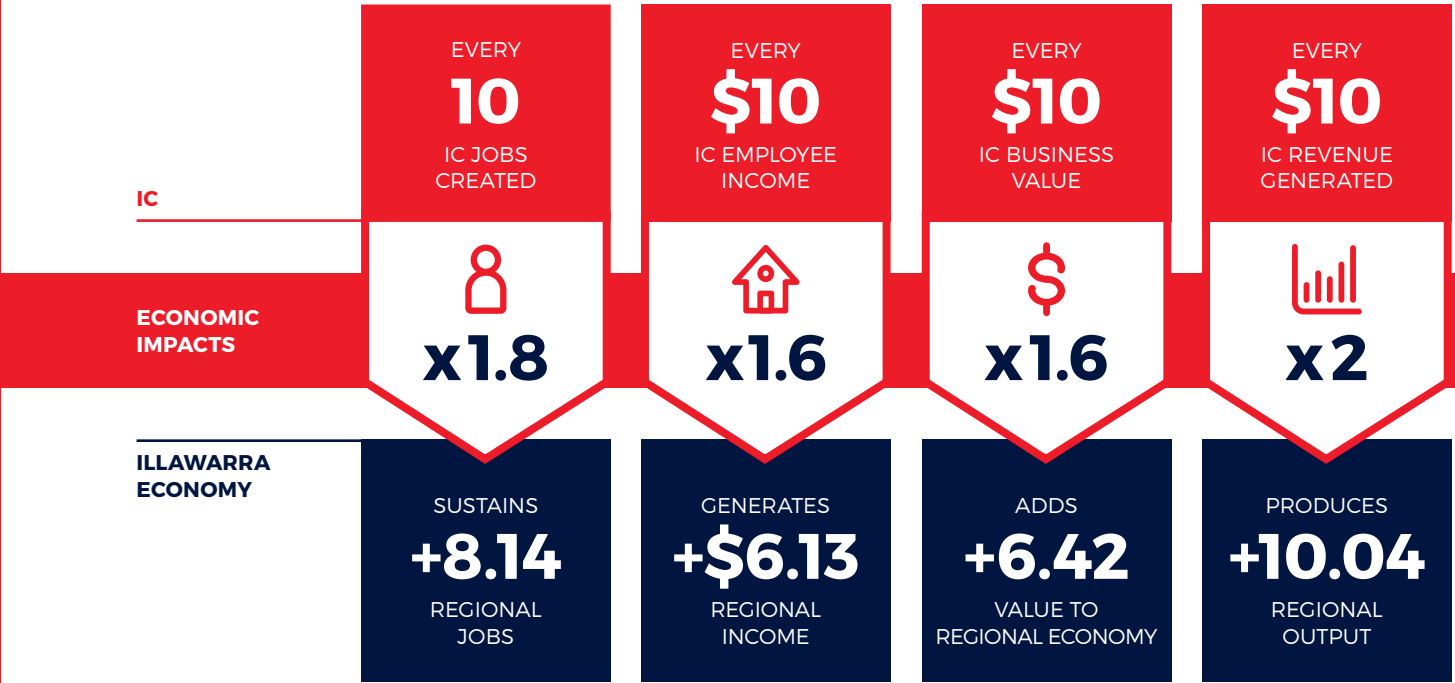
The Science Centre and Planetarium first opened in 1989 and was located in the old migrant building, just north of the current location. In 1998, Wollongong suffered severe flooding which significantly damaged the gallery, exhibits and equipment. In 2000, together with support from UOW and the NSW Government, the building was rebuilt and opened its doors to the public.

## Campus East

Campus East is one of the University's residences, housing 615 residents in flexi-catered and self-catered accommodation.

# Economic impact

The Innovation Campus is making a difference with impacts felt locally and globally. The Illawarra’s economic prospects are increasingly intertwined with the University and the National Innovation and Science Agenda highlights that universities have an important role in driving jobs, growth and investment.



### Campus contributes \$195m to region

The Innovation Campus plays a significant role in the regional economy, contributing \$195 million to the Illawarra region every year.

An economic impact assessment of the Campus was compiled using 2015 data, with key economic issues centred on jobs and job creation.

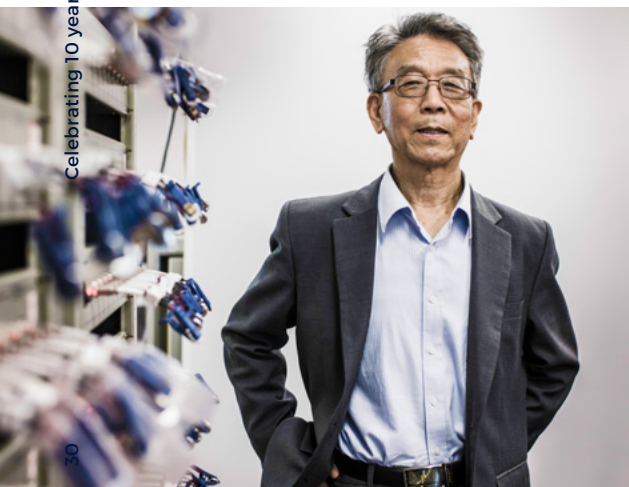
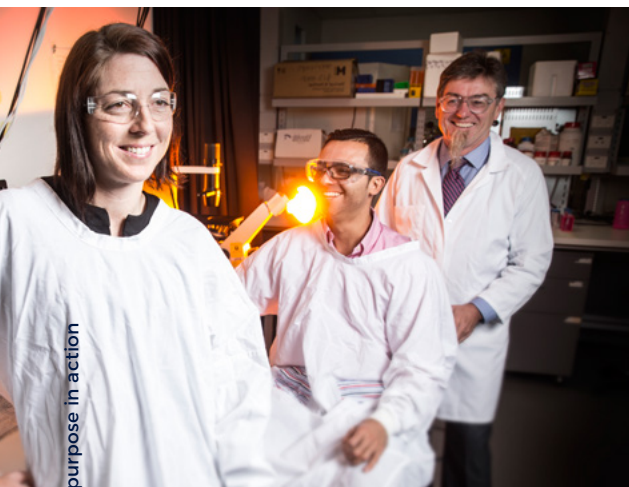
In 2015, the direct gross output of the Innovation Campus in the Illawarra region was \$195 million, and the direct value-added generated was \$111 million. This is the first economic impact study of the campus, and is a notable increase from modelling done in 2013 which estimated the Campus would provide \$162 million in direct gross output.

A total of \$96 million in labour income was directly generated by the Campus’s operations.

Other report highlights include:

- Every 10 jobs created at the Campus sustains another 8.14 jobs elsewhere in the regional economy.
- \$10 in direct household income paid to people employed at the Campus generates a further \$6.13 in income elsewhere in the regional economy.
- \$10 in direct value added by Campus businesses leads to a further \$6.42 in value added elsewhere in the regional economy.
- \$10 in revenue produced by the Campus leads to a further \$10.04 in output elsewhere in the regional economy.
- 501 full time employees (FTE) were employed at the Campus.





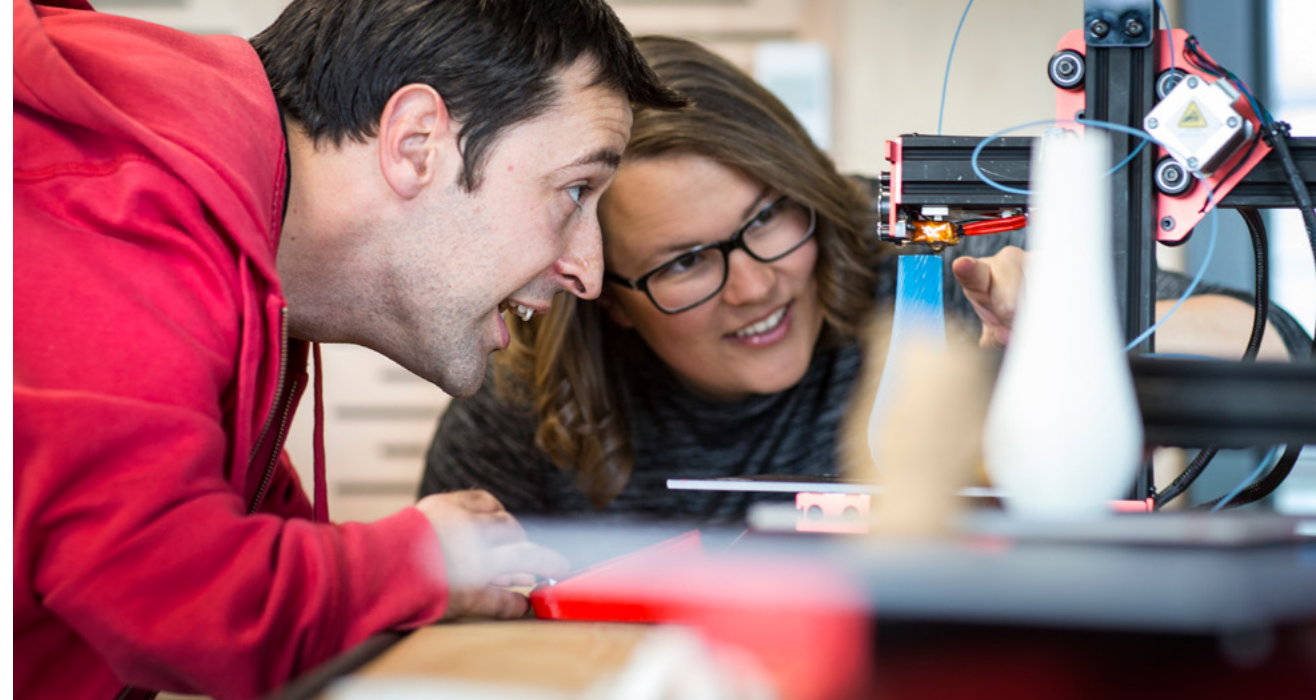
**Top:** Professor Gordon Wallace (right) leads the Australian Research Council Centre of Excellence for Electromaterials Science, which turns knowledge of polymer materials into next generation smart devices.

**Bottom:** Professor Shi Xue Dou leads the the Institute for Superconducting and Electronic Materials, which seeks to develop and commercialise new superconducting materials for energy storage, medical devices and advanced technologies.

## Business success

The campus has developed many economically-viable business activities including:

- Aquahydrex continues to host its global research and development facilities in Wollongong with more than 20 jobs created. It is the result of a culmination of years of research that has taken place at the Innovation Campus supported by grants from the Australian Research Council. The technology involves splitting water, with or without the use of sunlight, to produce energy in a process similar to that of photosynthesis.
- 3D printing manufacturer Me3D provides a range of 3D printers specifically for teaching additive fabrication and enabling STEM learning objectives, along with establishing a program to provide 3D printers free to schools.
- The winning team from the China 2013 Solar Decathlon event has produced two new businesses focussed on retrofitting existing residential dwellings with sustainable technologies to reduce costs and improve building sustainability.
- The Institute for Superconducting and Electronic Materials is working with Chinese steel maker Baosteel and other international partners to improve the energy efficiency of steel plants by developing new ways to capture heat from the steel-making process and convert it to usable energy.



## CASE STUDY 1: A stimulating work environment

Me3D is a success story that epitomises all that the Innovation Campus stands for.

Me3D was founded in late 2013 by researchers at UOW’s Australian Institute for Innovative Materials (AIIM) and a UOW alumna. The business designs and manufactures affordable 3D printing equipment to meet the needs of Australian education and helps create jobs at Greenacres Disability Services.

The three co-founders, Matt Connelly, Fletcher Thompson and Leanne Connelly, brought with them an experienced mix of design, engineering and economic backgrounds. Backed by close ties to the University of Wollongong, the iAccelerate programme and funding through ongoing sales, the company moved quickly from selling 20 printers a month to 200 and establishing an exceptional reputation for customer service in the market.

“Our dream is to engage as many kids in STEM education as possible to prepare the next generation of workers for a world where cars, houses, even food is made and customised locally using advanced manufacturing techniques,” UOW alumna Ms Connelly explains.

“This all sounds really good, but we wouldn’t have done any of it without the help and support of iAccelerate.

“We moved in in November of 2014 (when the iAccelerate Hub operated out of the Mike Codd Building before the Centre opening in 2016) and from our very first interaction, iAccelerate has been adding value to our business.

“We spent the next year taking full advantage of all the education programs on offer and picking the brains of every resident and advisor we could. We learned very quickly that we were doing everything the hard way.”

Ms Connelly says other residents helped Me3D set up their accounting process, do customer discovery, hone their pitch, find suppliers, have been their suppliers, have tested their product and bought their product.





**CASE STUDY 2:**  
**NEC partnership offers opportunities**

NEC Australia officially opened its new corporate office at the Innovation Campus in September this year, with the operation to create more than 130 new technology jobs and connect UOW students with graduate opportunities with NEC.

NEC has built a world-class IT Customer Service Management Centre at the Innovation Campus and the opening also presents opportunities for collaboration with leading researchers.

The service desk technology platform delivers productivity gains through automation and is to support Transport for NSW.

NEC Account Director Graeme Watchers says the company's close relationship with the Advantage Wollongong partnership, especially with the Innovation Campus, helped in establishing the corporate office in Wollongong.

"With access to a strong contact centre industry and support organisations, and local skilled labour pool, NEC has access to a ready pool of graduates," he says.

"The facilities on the Innovation Campus assisted NEC with bulk recruitment training facilities, 24x7 security arrangements and business continuity planning.

"The ease with which this was achieved was greater than would be experienced in a typical metropolitan commercial environment."

Mr Watchers says both NEC's locally-based staff and those visiting from other offices find the Innovation Campus a stimulating work environment and enjoy its world-class amenities.

"The Innovation Campus's researchers and its state-of-the-art facilities will enhance the value of NEC Australia's existing investments in ICT innovation in Australia.

"In selecting the Illawarra for its latest operation, NEC identified that the area represented the best opportunity to expand its east coast service capabilities – and specifically, the location is ideal for NEC's support of major customers such as Transport for NSW.

"The strategy and commitment is to build a sustainable knowledge economy centred on the Innovation Campus. NEC believes success is assured due in no small part to the creation of a true regional partnership with state and local government, and a world-class educational institution in the form of the University of Wollongong."



**Awards**

Just two months before 10th anniversary celebrations kicked off, the Innovation Campus was named the winner of the Emerging Research Park Award at the Association of University Research Parks 2016 awards.

The awards, held during the AURP 2016 international conference in Oklahoma City, Oklahoma, recognise excellence in research and science park development and practice. The Emerging Research Park Award is presented to an emerging park that has been in operation less than 10 years.

The Association of University Research Parks is an international body dedicated to fostering innovation and economic growth in the global economy through university, industry and government partnerships.

The Innovation Campus has received many awards and special recognitions including:

**2011**

- Winner, Property Council of Australia Innovative Excellence Awards –Best Business & Industrial Park Development
- Australian Timber Design Awards, People's Choice Award, AIIM Processing and Devices

**2012**

- Winner, NSW Professional Excellence in Building Awards, AIIM Processing and Devices, Research, Development and Technology category
- Winner, Australian Institute of Building Professional Excellence in Building Awards, AIIM Processing and Devices, Research, Development and Technology category
- Winner, NSW Professional Excellence in Building Awards, Certificate of High Commendation, Enterprise 1

**2013**

- Finalist, Innovation & Excellence Awards, Property Council of Australia
- Winner, Masters Builders Australia (MBA) Excellence in Construction Awards (2013), Telstra Environment and Energy Efficiency Building Award, Sustainable Buildings Research Centre (SBRC)
- Winner, StartUp Trophy, SydStart, iAccelerate Advanced Resident CriticalArc
- Commendation, Educational Architecture, Sustainable Research Buildings Centre (SBRC)

**2014**

- Winner, Engineering Excellence Awards – Presidents Award, Engineers Australia, SBRC
- Winner, CeBIT.AU, iAccelerate Advanced Resident, Me3D
- Finalist, Engineering Excellence Awards – Building and Structures, Engineers Australia, SBRC
- Highly commended, Engineering Excellence Awards – Environment & Heritage, Engineers Australia, SBRC.

**2015**

- Certified Living Building in Australia, SBRC
- Awarded 6 Star Green Star rating, Green Building Council of Australia
- Winner, Best Collaborative Environment Project, International Association for Public Participation Australasian Affiliate (IAP2), Twyfords
- Winner, Best Confluence Cloud Add-On Award, Atlassian Codegeist, Arijea
- Winner, Best Female Founder and Most Disruptive Technology Tech23, Me3D
- Winner, CeBIT.AU Community Support Award, iAccelerate Advanced Resident, Me3D
- Winner, Innovation of the Year Award, Architecture and Design's Sustainability Awards, Enwares
- Finalist, Tech23 Awards, Me3D
- Winner, Milo Dunphy Award for Sustainable Architecture, AIA NSW – SBRC
- State Commendation for Education Architecture, AIA NSW - SBRC
- Finalist, Timber Design Awards – SBRC

**2016**

- Winner, Best Commercial Success at Tech 23 - GeoInteractive - iAccelerate



# Looking into the future

The Innovation Campus will continue to work with industry, business and government to build a better Illawarra for tomorrow.

## Continual growth

It is the university's ambition for the Innovation Campus to provide total floor space of 135,000 square metres. The master plan accommodates 25 buildings and a workforce of 5000 people within research precincts of innovative manufacturing, health and wellbeing, sustainability, innovation, ICT and finance.

## Innovation ecosystem

We will continue to help grow the Illawarra's innovation ecosystem, attracting business, research and investment. We will retain the University's high-quality graduates while making the Illawarra a destination for innovators and investors.

## Celebrating partnerships

We will focus on our partnerships with industry and social enterprises, particularly technology-focused SMEs, to enable them to innovate and thrive in increasingly competitive markets.

UOW will continue to work with its partners to see Wollongong recognised as a university city.

## Precinct development

The University is looking to further develop the Health and Wellbeing Precinct at the Innovation Campus.

The objectives of development include:

- Advance the University's Global Challenges Program's research initiatives of transforming lives and regions and living well, longer;
- Continued implementation of UOW's Innovation Campus Master Plan;
- Support UOW academic, health and research programs;
- Assist the economic transition of Wollongong and the Illawarra region; and
- Create jobs and employment opportunities for UOW graduates.

## STEM focus

An initiative involving a refurbishment and augmentation of the Science Centre is being looked at to form a STEM-focussed centre for education, teaching and research engagement. It will provide a fully equipped space in which individuals and groups can become familiar with new technologies (such as 3D printing, scanners, laser tools) in a supportive environment on a 'try before you buy' approach.





Evolve.  
Question.  
Never stand still.





UNIVERSITY  
OF WOLLONGONG  
AUSTRALIA

---

**/INNOVATION  
CAMPUS**