

# Buildings & Estates NEWS

Issue 3 | December 2019

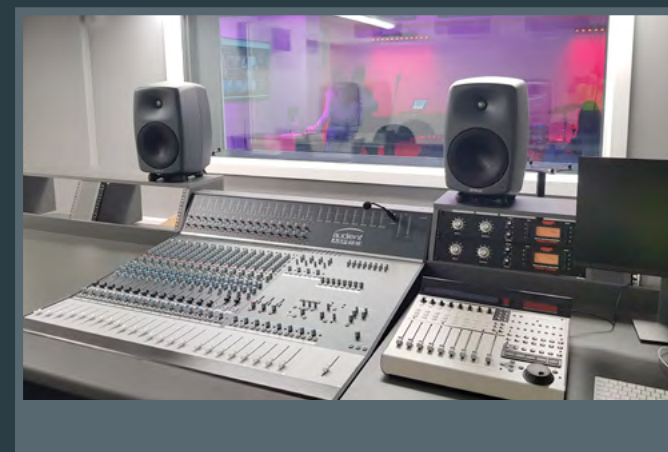
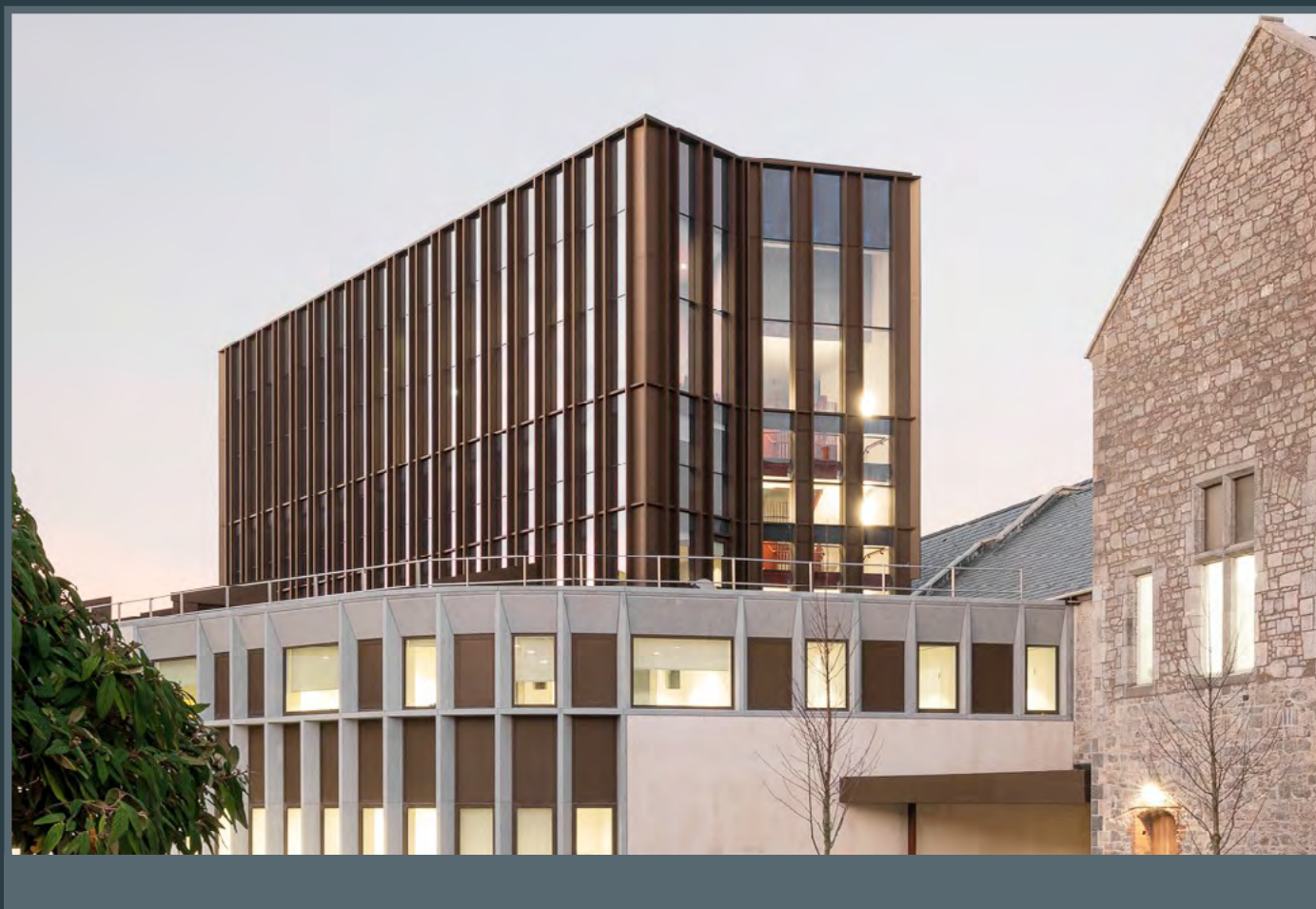


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Welcome to our Newsletter

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## Welcome to our latest Buildings & Estates Newsletter

It has been another busy year for the Buildings & Estates team, and we are delighted to see progress on the major capital projects and our Backlog Maintenance Programme. We hope you enjoy browsing through our newsletter which showcases a selection of the works that have been completed during the year, along with details of some major projects to come. We would love to get your feedback so please share your views with us.

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## The Hub

The UCC Hub Building is a lead project in the University's Strategic Plan 2017 - 2022 "to deliver on the University's innovative academic mission and create a seamless student-centred experience". The building will offer a series of new exciting spaces for use by students and staff. The heart of the building is a large atrium, the Shteppe and the Allman & Smith rooms, are particularly impressive new types of spaces on campus.

The Hub will accommodate the following major aspects of a world class student experience:

- Teaching and Learning Zones, facilitating experimental teaching on innovative modules, and supporting peer enabled and shared learning in a technology rich environment;
- Student development, employability and support centre to aid student personal development, peer support, employability skill development and academic success;
- Facilitating student-led services and voluntary care initiatives



and providing facilities for the integration and delivery of student activities in a student-centred environment;

- Integrated student administration interface (both the physical **Student Central** and e-based enhanced student information management system).

The new 3,951m<sup>2</sup> building involved expanding the existing 1,204m<sup>2</sup> of the original Windle Medical building by adding 2,747m<sup>2</sup> over five storeys to the west. The Medical Building was one of the earliest buildings on campus comprising five original blocks. The first block (known as the Clarendon Building) was built in the 1850's by Thomas Deane and four further blocks were built in the 1860's and 1870's. The building is listed on the National Inventory of Architectural Heritage and is a Group 1 category building of significance within the University's Conservation Plan.

The project is designed by leading Irish architects O'Donnell & Tuomey.

Tours were organised for staff on the 12th and 13th December and occupation of the building has commenced, and it will be fully open for use in January 2020.





## Cork University Dental School and Hospital (CUDSH)



Reddy Architecture + Urbanism has successfully achieved planning permission for the new Dental Building. UCC has established a national reputation for delivery of healthcare and education, research and development facilities. The College of Medicine & Health looks to build on this reputation with the Dental Building, in the Cork Science and Innovation Park at Curraheen.

The proposed Dental Building occupies a prominent corner of the Science Park and will be one of the first major buildings of the masterplan. The building forms a gateway to the research and innovation healthcare campus and contains a mix of healthcare, education, research and innovation facilities. In particular it provides excellent dental health services for the public, clinical teaching spaces for dental students along with education, research and innovation spaces.

At the core of the design is the ambition that the building will provide a welcoming and comfortable experience for patients, a creative learning environment for students, a positive working environment for dentists, clinicians and academics and also be an exemplar high quality piece of iconic architecture for the UCC Science and Innovation Park.

The project is currently in the detailed design phase and will go to tender next March 2020 with a plan to start on site in August 2020 and be completed in May 2022 ready for start of term.



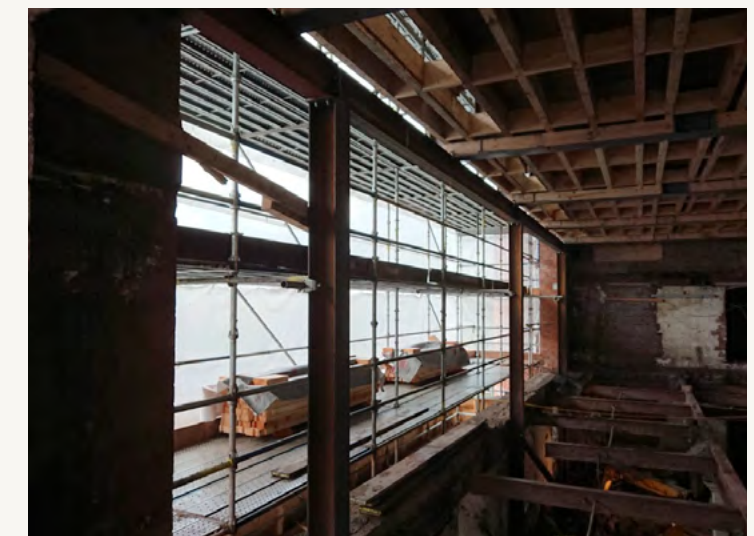
## Tyndall National Institute - Phase 3 Office Refurbishment

The Tyndall Phase 3 office refurbishment is an upgrade project of one of the older buildings in the Tyndall National Institute. The design team is led by Scott Tallon Walker Architects.

The brick structure was constructed in 1903 and was originally a kiln building and part of the Maltings complex until its conversion to a 3 storey office building in the last 50 years. It is adjacent to the boundary with Presentation Brothers secondary school and the river Lee.

As part of the upgrade the building will require all internal structures including floors, stairs and partition walls to be fully demolished and removed. The current cellular office layouts will be replaced by open plan floors and a new façade design on the western elevation. The project will deliver an extra floor in the structure as well as aligning the current floor levels with the floors of the adjacent building. As part of the conservation element of the project all existing roof tiles will be carefully removed with the intention of reusing them on the finished structure. The existing lime mortar brickwork joints will also be repointed and brought back to their original condition. The project will result in an increase of floor area from 450m<sup>2</sup> to 620m<sup>2</sup> and will double the occupancy potential of the building.

The project was also subject to an Energy Efficient Design review process that was coordinated through the UCC Energy & Utilities Manager and Tyndall Facilities Manager. A new external stairs will be constructed to create additional fire escape routes from each floor and provide an improvement in general circulation within the building.





# EIB Backlog Maintenance Programme

## Geography & Civil Engineering Buildings – External Stairs

The Buildings Office has been busy implementing the EIB financed Backlog Maintenance Programme with projects focused on five thematic areas, i.e.:

- Health & Safety
- Infrastructure
- Insurance Requirements
- Access
- Energy.

A wide range of projects have been implemented across campus. These have improved the condition of our buildings and grounds and our supporting infrastructure. Two major escape stairs have been managed by the Capital Projects Office.

The recently completed emergency escape external staircase to the Geography building was constructed to replace the steel structure which had reached the end of its design life and was no longer fit for purpose.

The Geography building, which originally housed the Diary Science Hall, was built in 1921. It is a detached three-storey over part basement building. It has a pitched slated

roof and cut stone faced chimneystacks and cast-iron rainwater goods. The walls are snecked, rough-faced limestone with dressed stone to openings. The new stairs provide a full height enclosed modern stairs with zinc cladding to complement the existing building, and its design is in keeping with UCC’s conservation plan.

The new Civil Engineering building emergency/accommodation stairs is also recently completed. This new staircase is full height with copper cladding, which will develop a pale green patina over time to blend in with the original copper features of the existing building.

The Civil Engineering building was built in 1910. It is a three-storey building with projecting entrance lobby and dashed cement render. A staircase tower was added to the western elevation of building in 2001.

The latest staircase will provide a fire escape from the building’s drawing office on the 1st floor and the east end of the building, allowing higher numbers to use the building safely.





Minor Works Projects: Basement Recording Studio, St Vincent's. (Michael O'Sullivan, Aidan O'Dwyer & Brian Walsh, B&E)

## Basement Recording Studio

The refurbishment of this area of St Vincent's opens up a new enhanced facility for the teaching of audio recording and ensemble rehearsal. This experimental teaching and performance space will give students a great opportunity to see, learn and participate in the workings of a professional recording studio. Students will be able to set up instruments and microphones, adjust the sound & levels, work on post-production of recordings where they will take the finished recording and manipulate the recorded sound with a number of technologies and different equipment. The collaborative space has been developed with high levels of acoustic treatment and specialised air-conditioning.



Pictured above: before refurbishment;  
Left, top and bottom: after refurbishment.



## University Staff Recognition Awards: The Buildings and Estates Grounds Team



Pictured (l-r): Ger Creedon (Grounds Operative), Patrick Hallinan (Grounds Operative), Barrie Curley (Estates Administrator), Prof. Patrick O'Shea (President of UCC), Noreen O'Sullivan (Grounds Operative) and John Murphy (Grounds Foreperson).

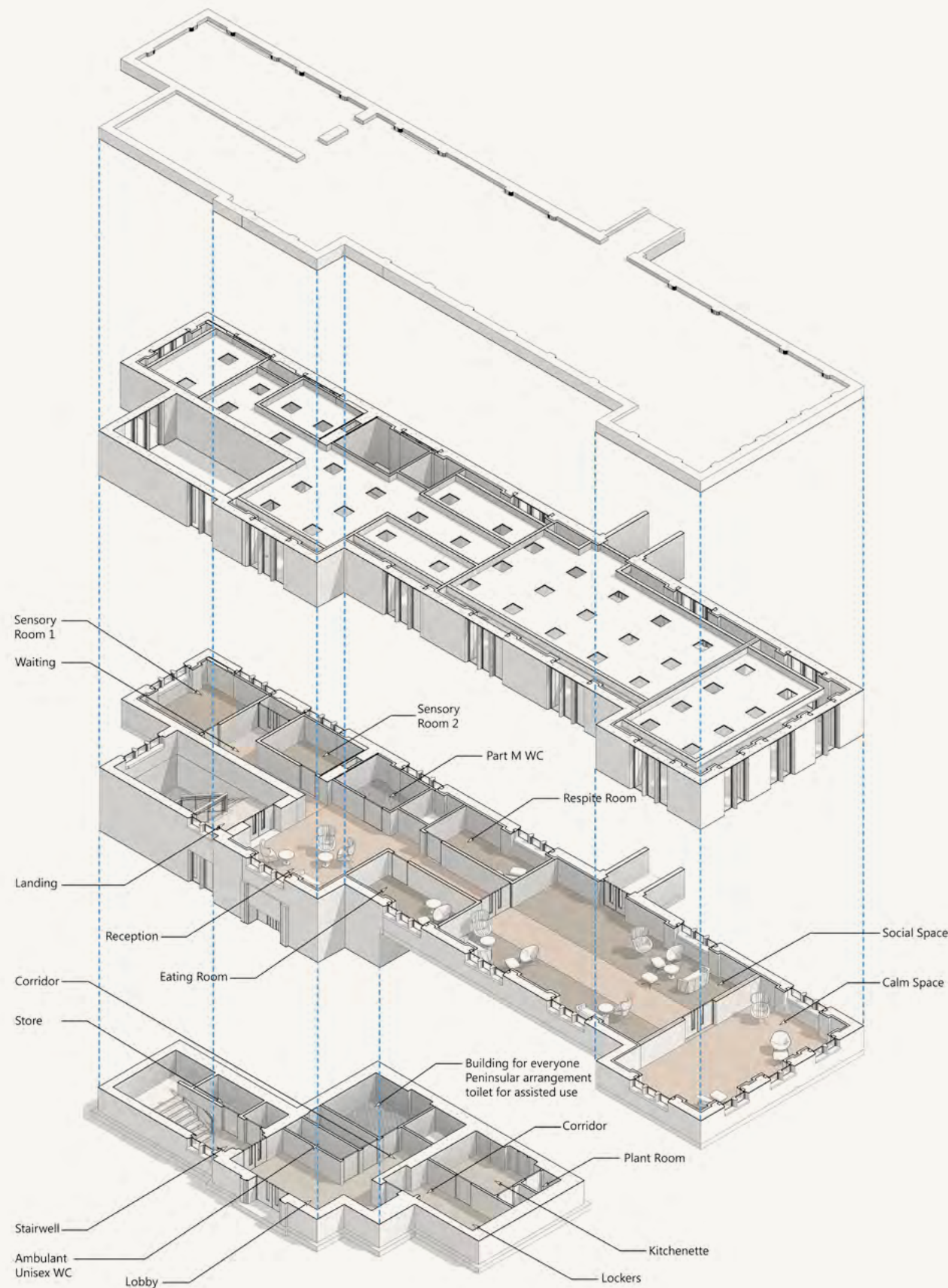
In October 2019, our colleagues, the Buildings and Estates Grounds Team were honoured at the UCC Staff Recognition Awards in the category of 'Enhancing the Student Experience'.

The Grounds Section is responsible for the management and maintenance of 30 hectares of grounds, in support of the University's core functions of teaching and research. The core of their work involves grass cutting, Estates management, waste management, sweeping of paving, planting, pruning, tree management, salting etc.

They work in an extremely busy and challenging environment no matter the weather, all in the pursuit of having the Estate presented, to a standard higher than ever before. The campus must look its best from dusk till dawn, 365 days a year. While the green estate can look magnificent and draw large attention, the work on the hard landscaping can go largely unnoticed, being swept, weeded and cleaned, before many even arrive on campus. The role of the Grounds Team is vital to develop the Campus in a progressive manner, in order to further enhance the UCC experience and to contribute to the cultural attractiveness of Cork.

The Buildings and Estates Office is very proud of the Grounds Team's contributions to the estate where our staff, students and visitors can work, study, create and endeavour, surrounded by a most beautiful and well-appointed Campus.





## Autism Friendly Space

The Autism Friendly Space is funded by the Student Charges and Fees Forum. Located in what was the Old College Bar, the project includes the creation of sensory rooms, eating rooms, respite rooms, social spaces and calm spaces. Crucial aspects of accessibility will be addressed by the inclusion of a new lift plus the provision of completely accessible bathrooms that surpass the current building regulations. This project follows on from key developments including the installation of the acoustic pod on Q+1 in the library and the refurbishment of the rear section of the Assistive Technology Lab (including the provision of flexible furniture).

The space is currently under construction and will be ready for occupation in early 2020.



Minor Works Projects: Outdoor Teaching Space (Michael O'Sullivan, B&E)

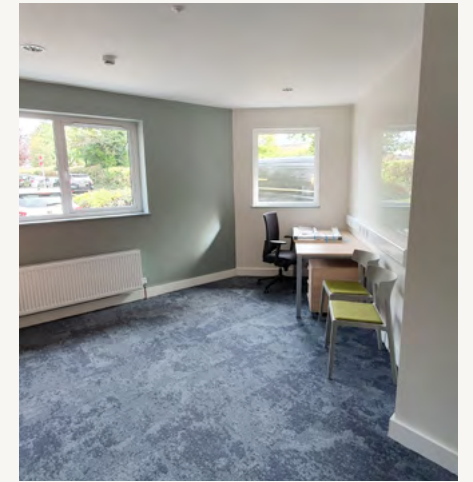
## Outdoor Teaching Space

This unique innovative Playscape design, located to the rear of No. 3 Fernhurst, was a collaboration between Buildings & Estates and School of Education. It includes a climbing wall, balance beam, wheelchair access to raised sand area, shingle roof covered area, mound with crawling tunnel and other high sensory accessible play items. This experimental teaching space will be particularly important in the context of the Early Years and Childhood Studies (EYCS) and Sports Studies & Physical Education disciplines as it seeks to facilitate important 'practice-based' research opportunities within and across these fields. It is a creative response to new policy directions that are informed by growing national and international evidence on the educational importance of: integrating 'play' in practice; engaging pupils in regular exercise and cooperative relations; highlighting the central importance of pupil wellbeing in their own learning; and promoting healthier and positive ecological lifestyles.





Minor Works Projects: Extension to the Rotunda at the Cork Enterprise Centre. (Paul Williams, B&E)



## Extension to the Rotunda at the Cork Enterprise Centre

This project came to fruition due to cooperation between Buildings and Estates and the School of Applied Psychology. The development consisted of a single storey extension with a scope to deliver four offices, a storeroom and alterations to the already in-situ flood wall to east elevation of existing Rotunda at the Enterprise Centre.

The first photo shows the original elevation, the second is the completed elevation from the same location, and the others are of one of the offices, the

multi-purpose teaching room and the last one is of the outside taken from the entrance side of the Enterprise Centre.

Work consisted of demolishing all the internal walls, building an extension to the eastern side consisting of four offices and a store room, rewiring, extending the heating, blanking off the windows internally in order to better insulate the building, insulate the roof space, fit mechanical ventilation to cope with the extra capacity of approximately 50 to 60 people.



Minor Works Projects: Space Optimisation. (Eamonn Connaughton, Peter O'Hanlon, Adrian Downey, B&E)

## Space Optimisation at Western Gateway Building



In response to the demand for more computer science graduates, the School of Computer Science & Information Technology (CSIT) introduced two new inter-disciplinary UG programmes in 2018, - BSc Data Science and Analytics and BA Psychology and Computing.

It is projected that this will result in an increase in student FTE's of 36% by 2022. There was a requirement to create an 80 seater dual boot Linux and Windows 10 lab to meet this demand. Funding for the project was provided through school generated funds.



Multiple options were considered and two existing computer labs in the Western Gateway were identified for redesign. Designing from first principles allowed us increase the workstations by 41% (58 to 82 workstations).

Once design was agreed with the stakeholders, - we applied for a new Fire Safety Certificate (FSC) and Disability Access Certificate (DAC) and logged the project with Building Control Department in Cork City Council. These are necessary steps in a project that involves a material alteration to a building.

Project involved:

- The removal of dividing wall between the labs.
- Disconnection of all electrical and data points to existing workstations.
- Reconfiguration of work benches and reconnection/testing of electrical and data circuits.
- Addition of 24 new workstations and associated electrical and data requirements.
- Reconfiguration of Audio Visual equipment and teacher's desk.

### Customer Feedback

This multi-functional lab has improved the effectiveness of delivery of laboratory sessions, reduced the need to repeat labs and provided students with new faster machine running up to date software. It is one of our brightest labs and is the lab of choice for students. The design of the lab space, by moving the power sockets to desk makes the computers much more accessible and better for staff who keep the software up to date.



## Heritage

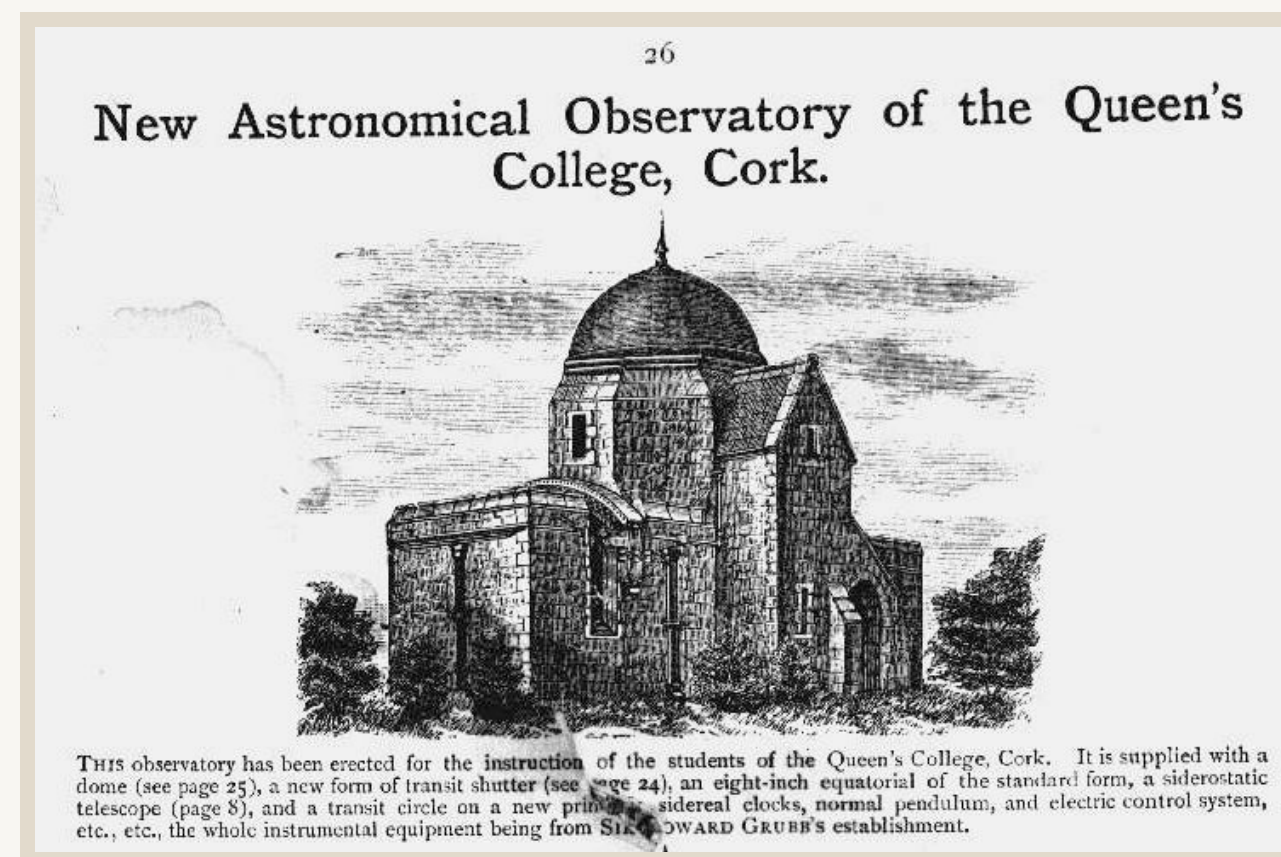
As part of Culture Night 2019, our acting curator Margaret Lantry gave a talk about the Crawford Observatory. It was built during the Presidency of Dr William Kirby Sullivan, a native of Dripsey, who was anxious to modernise the facilities of the College. The project was funded through donations, primarily from William Horatio Crawford of Lakelands, Mahon, who gave £2,550 to the project between 1878 and 1893. The architect was James Higgins Owen of the Board of Public Works, the contractor was Edward Fitzgerald (whose initials can be seen on the downpipes), with builders D. O. Sullivan & Sons and J. Sisk. Work on the covering dome was by J. Perry & Sons and R. Perrott & Son and the instruments were made by Howard Grubb, Rathmines, Dublin, a world-renowned scientific instrument maker.

The orientation of the observatory is determined by the transit telescope, which is located on the eastern side of the building. This room is fitted with a shutter that was innovative at the time. The western room contains a siderostatic telescope that was used by John England, Professor of Natural Philosophy (Physics), to view the Transit of Venus on 6th December 1882. This room also formerly contained a seismograph (Milne Twin boom 1910 pattern) installed in about 1911. The Observatory is still important today. In September 2019, a gravimeter was used to measure absolute gravity at the Observatory, which is now part of the International Gravity Station Network.

More information at: [www.ucc.ie/en/physics/news/the-gravity-of-the-situation-in-the-crawford-observatory.html](http://www.ucc.ie/en/physics/news/the-gravity-of-the-situation-in-the-crawford-observatory.html)

Under the dome is located Grubb's equatorial telescope with an 8-inch aperture and focal length of 10 feet, which won the gold prize at the 1878 Paris exhibition. Grubb featured the Observatory in his 1888 catalogue (see image). Dr John Butler, Armagh Observatory, in his 1994 report on the Observatory, highlighted six innovations introduced by Grubb in the Crawford Observatory alone.

Today the Observatory is unique in Ireland for the remarkable state of preservation of its instruments and the original condition of the building, which is on the record of Record of Protected Structures.





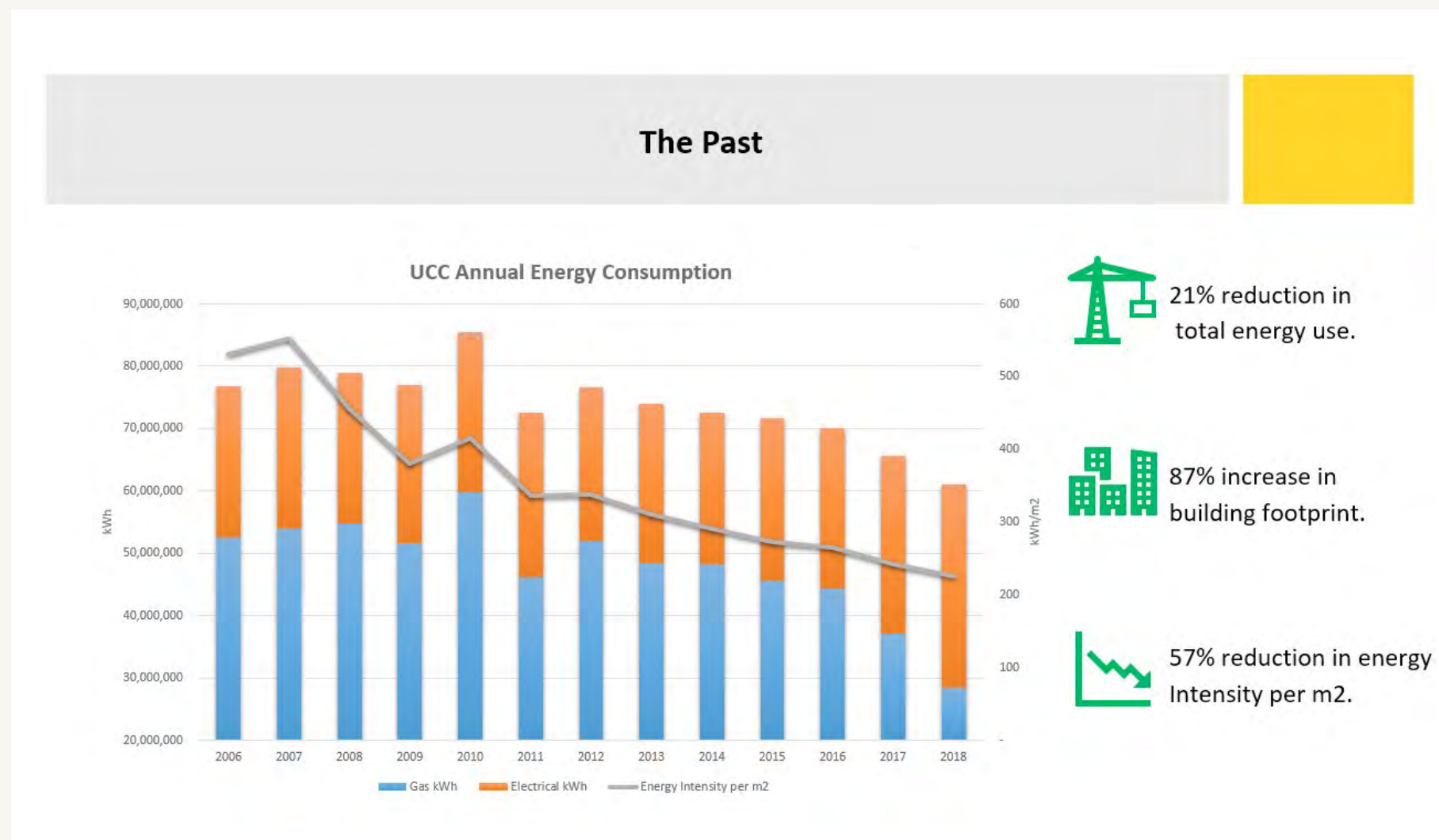
# UCC Energy Performance Academic Year 2018/19

15 buildings account for 85% of UCC’s annual energy load and these were the main focus of our energy management activities over 2018/19. Through on-going engagement, undertaking energy saving projects and through close management by key personnel within the buildings UCC’s annual energy consumption reduced by 3% when compared to 2017/18. A number of energy efficiency projects were completed that avoided 500,000 kWh over the period which offset the increases that were seen in the Student Hub construction activities as well as the occupation of Lapps Quay. Milder winter temperatures in 2018/19 as well as energy conservation projects avoided the consumption of 3,200,000 kWh of gas. The minor works team, with the aid of SEAI funding, completed LED lighting upgrades in the ERI building as well as the installation of solar PV panels on the ORB office so we look forward to conserving more energy into the future. All of the above means we are 40.6% below our 2006-2008 baseline period, thereby exceeding the 33% National Public Sector targets.

In 2019 UCC signed up to the Certified Water Stewardship Program, with the objective to build on our existing water conservation

practices. As part of the program the Engineering Services team carried out a number of conservation measures over the summer period, which has conserved 1,200,000 litres of water over a 3-month period and we look forward to more water conservation initiatives over the coming months.

In the meantime please remember you can play your part by switching off equipment before you leave the office and if you have any comments/suggestions on UCC’s energy management please contact [p.mehigan@ucc.ie](mailto:p.mehigan@ucc.ie)





## Commuter Plan



### UCC P+R Shuttles – long serving driver retired

At the end of August, faces changed behind the wheel of the UCC Park and Ride shuttles: After more than 13 years, bus driver Jerzy Bartczak retired from our service provider Barry's Coaches. Jerzy started driving the UCC shuttles in 2006 and has been doing so longer than any other of the drivers, making him the face of our shuttle services between Campus and Pouladuff car park.

*“Over the years, I drove generations of students. I also knew the children along the route, walking to primary school with their parents. At some stage, many of them became UCC students sitting in my bus.”* We thank Jerzy for the excellent service to the UCC community. Michael McCormack (General Services) and Stephan Koch (Commuter Plan Manager) wished him well on his last day on the UCC shuttle.

## OTHER NEWS

Works have commenced on the **Crows Nest** site. It is expected that student accommodation comprising of 255 beds and Student Health services will be completed for the 2021/22 academic year.



UCC **GREEN** CAMPUS



Green Campus: Pat Mehigan and Maria Kirrane

## UCC Green Campus

Buildings and Estates continues to play a key role in UCC's Green Campus Programme. In the past year UCC was ranked number 9 globally in the UI Green Metric World University Rankings, and number 1 for SDG12 under the Times Higher Education Impact Ranking.

More on these achievements, and the initiatives that contributed to them, can be found in UCC's Annual Sustainability Report. To view report click [HERE](#)





