



University for the Common Good

School of Computing, Engineering  
and Built Environment

Annual Celebration 2023



# Annual Celebration 2023

- 5.00**      **Arrival and registration**
- 5.30**      **Welcome**  
Professor Steve Decent, Principal and Vice-Chancellor
- 5.35**      **Highlights from the School**  
Professor Carl Schaschke, Dean, School of Computing, Engineering and Built Environment
- 5.45**      **Guest Speaker**  
Eamonn Keane, Global Director of Digital Forensics and Incident Response, Systal Technology Solutions
- 6.00**      **Industry prizes presented by Professor Scott McMeekin**  
Vice Dean, School of Computing, Engineering and Built Environment
- 6.15**      **STEAM Fund and industry support impact**  
Jillian Watt, Director of GCU Foundation, Alumni Engagement and Events
- 6.30**      **Professional body prizes presented by Professor Scott McMeekin**  
Vice Dean, School of Computing, Engineering and Built Environment
- 6.40**      **Close**
- 6.45**      **Dinner and networking**



**Eamonn Keane**  
Global Director of Digital Forensics and Incident Response at Systal Technology Solutions

## Guest Speaker

Eamonn previously held the position of Head of Cyber Security & Innovation at the Scottish Business Resilience Centre and was a Detective Inspector within the Irish and Scottish Police Forces, where he worked for over 35 years. At Police Scotland, he was Head of Cybercrime and Investigations, where he played a vital role in the forensic investigation of many national and international digital crimes.

In addition to his role as Global Director of Digital Forensics at Systal Technology Solutions, Eamonn is a Cyber Cluster Integrator at ScotlandIS – Scotland’s digital economy membership organisation, where he works primarily with cyber start-ups.

In recognition of his contribution to the industry, Eamonn recently won a lifetime achievement award at the Scottish Cyber Awards 2022.



## Welcome from the Dean



**Professor Carl Schaschke**

Dean, School of Computing, Engineering and Built Environment

Welcome to the Annual Celebration of Glasgow Caledonian's School of Computing, Engineering and Built Environment (SCEBE).

As one of the leading schools of its kind in the UK, we deliver modern, innovative and exciting programmes accredited by professional bodies. Our highly skilled and dedicated academics have an excellent reputation in providing undergraduate and postgraduate courses to suit the needs of industry, with subjects including Computing, Computer Games, Civil Engineering, Construction Management, Cyber Security, Data Science, Artificial Intelligence, Digital Design, Forensic Investigation, Electrical Engineering, Environmental Management, Mechanical Engineering, Surveying and User Experience. We offer flexible delivery modes and teach the largest number of part-time and work-based students in Scotland.

As the University for the Common Good, we are proud to be a leader in widening access, welcoming students from all backgrounds and supporting them throughout their journey to reach their full potential. Passionately committed to being inclusive, and increasing diversity across our programmes, the School has been formally recognised for its commitment to gender equality by attaining the Advance HE's Athena SWAN Institutional Silver Award.

We are proud of our extensive links with industry, striving to help business and organisations adapt, grow and develop through our leading research, consultancy and knowledge transfer partnerships. Our industry partners play a pivotal role in enhancing the student experience through access to financial support, delivering inspirational talks and enhancing employability through placements and mentorship.

We look forward to continuing to partner with you in the future. Thank you all for the important role you play in the success of our School, and of our talented students.

# Highlights from the School

## Women in Cyber Security

As part of International Women’s Day in March this year, Glasgow Caledonian established a student chapter of Women in Cyber Security, a non-profit organisation dedicated to the advancement of women in this industry. The chapter is aimed at promoting opportunities in cyber security, and is just the fourth to be established in the UK so far.



## True cost of waste

A tool developed by researchers at Glasgow Caledonian, to measure the “true cost” of waste on Scottish construction sites has influenced a ground-breaking industry protocol. A series of studies conducted by the University, itemised and calculated the cost of waste items found on multiple Scottish sites, using a tool the researchers developed to log waste items found in typical 'mixed-waste' construction skips. Now the tool has been adopted by Zero Waste Scotland as part of its Site Waste Reduction Protocol.

## Transnational education in Oman

In January, our students put their learning to the test when they looked to solve ‘energy security’ problems in Oman, while also drawing comparisons to those in Scotland. A multidisciplinary group of third year students from SCEBE visited the University’s partner institution in Oman, the National University of Science and Technology, for an intensive week-long study trip. They looked at various hypothetical solutions to ensure uninterrupted availability of energy sources at an affordable price.

## Dr Mary Robinson honoured

Glasgow Caledonian’s innovative Centre for Climate Justice has been renamed in honour of the global advocate who helped found it. Former Irish President Dr Mary Robinson, an honorary graduate of the University and internationally recognised voice on climate issues, helped establish the Centre in 2016.



## Lord Willie Haughey OBE Masterclass

One of Scotland’s leading philanthropists and businessmen shared his expertise during a Masterclass at Glasgow Caledonian. Lord Haughey, who is an honorary graduate of the University, gave insight into his exceptional career journey, as well as what drives his entrepreneurial flair and commitment to helping others.

“Our success is built on the fact that every contract we have with a client is an open book,” he said during the Masterclass. “They see exactly what the job costs us to do and we add a 10% margin. This transparency means we have clients who trust us. We have no sales and marketing team - people remember us and they use us again and again, or recommend us to somebody else. That is what has allowed us to grow into the business we have become.”

## Highlights from the University

We take a look back at some of the key developments and events at Glasgow Caledonian during the past year.

### Glasgow Caledonian appoints new Principal and Vice-Chancellor

Professor Steve Decent joined the University as Principal and Vice-Chancellor in January 2023.

Professor Decent brings substantial senior leadership experience and a strong affinity with the University's values to the role. He joined Glasgow Caledonian from his position of Provost and Deputy Vice-Chancellor at Manchester Metropolitan University, where he led on strategic planning, academic delivery, and regional and business engagement, with a proven track record in widening access and growth of degree apprenticeships.

Having graduated with a BSc in Mathematics at Brunel University, and a PhD at the University of St Andrews, Professor Decent is a Fellow of the Institute of Mathematics and its Applications, and specialises in research on free-surface flows, including liquid jets and water waves. He also has a keen interest in hydrogen fuel cells.



Glasgow Caledonian sets new record for widening access

The University's outstanding commitment to widening access with excellence has been highlighted in new Scottish Funding Council figures, with Glasgow Caledonian achieving its best ever result. In 2020-21, 23% of our Scottish full-time, first-degree entrants were drawn from the country's 20% most disadvantaged backgrounds. This is well above the sector average of 16.7%.

Furthermore, our overall rate for successful completion of studies by Scottish full-time first-degree students increased to 94%. Our rate of retention of entrants from disadvantaged backgrounds has increased to an outstanding 92.8%, our highest to date, and places Glasgow Caledonian as the top-performing modern university.

### A global leader in gender equality

Glasgow Caledonian's long-standing dedication to delivering impact on the United Nations' Sustainable Development Goals has seen the University named fourth in the world - and number one in the UK - for promoting gender equality in the latest Times Higher Education University Impact Rankings.

### Glasgow Caledonian among the UK's best in Good University Guide 2023

The University climbed eight places in the Times and Sunday Times Good University Guide 2023, moving from 60th to 52nd out of 132 universities in the UK. This is the highest increase of any Scottish university and makes Glasgow Caledonian the top performing modern university in Scotland. We have moved up an impressive 57 places in the last six years alone.



# Industry Prizes

Astute Fire  
Best Level 3 / 4 Student



**Stephen Philip Johns / Katharine Skinner**  
*BEng (Hons) Fire Risk Engineering*

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Frick n Frack Games  
Best Level 3 Student



**Nina Kosch**  
*BSc (Hons) Computer Games (Art and Animation)*

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Balfour Beatty  
Best Level 3 Student



**Oliver Paul**  
*BSc (Hons) Quantity Surveying*

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George Leslie Ltd  
Best Level 3 Student



**Shannon Cooper**  
*BEng (Hons) Environmental Civil Engineering*

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Balfour Beatty  
Best Level 3 Student



**Hannah Steele-Milne**  
*BSc (Hons) Construction Management*

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Howden  
Best Level 3 Student



**William Rankin**  
*BSc (Hons) Mechanical Systems Engineering*

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Barrier Networks  
Best Level 3 Student



**Samuel Wilson**  
*BSc (Hons) Cyber Security and Networks*

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ID Cyber Solutions  
Best Level 3 Student



**Georgia Milton**  
*BSc (Hons) Digital Security and Forensics*

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Clancy Consulting  
Best Level 3 Student



**Robert Tonner**  
*BEng (Hons) Building Services Engineering*

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Individual Donor  
Best Level 3 Student



**Tristan Brossy De Dios**  
*BSc (Hons) Computer Games (Design)*

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Clancy Consulting  
Best Level 3 Student



**Erika Tonhauser**  
*BSc (Hons) Environmental Management*

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Individual Donor  
Best Level 3 Student



**Amie Lark McLaughlin**  
*BSc (Hons) Computer Games (Software Development)*

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CPA  
Best Level 3 Student



**Alexandru Belea**  
*BEng (Hons) Electrical and Electronic Engineering*

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Individual Donor  
Best Level 3 Student



**Ryan Alexander**  
*BEng (Hons) Computer Networking*

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Cushman & Wakefield  
Best Level 3 Student



**Claire Docherty**  
*BSc (Hons) Real Estate*

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Individual Donor  
Best Level 3 Student



**Georgios Kozakos**  
*BSc (Hons) Computing*

Individual Donor  
Best Level 3 Student

**Melissa Robertson**  
*BSc (Hons) Digital Design*



Xburo  
Best Level 3 Student

**Craig Minto**  
*BEng (Hons) Electrical Power Engineering*



Individual Donor  
Best Level 3 Student

**Sam Parks**  
*BSc (Hons) Information Technology Management for Business*



Individual Donor  
Best Level 3 Student

**Sarah Speirs**  
*Graduate Apprenticeship BSc (Hons) Environmental Civil Engineering*



Mediaspec  
Best Level 3 Student

**Gavin Thomson**  
*BSc (Hons) Audio Technology*



Merck  
Best Level 3 Student

**Ingrid Ellen Rendall**  
*BSc (Hons) Forensic Investigation*



Sabio  
Best Level 3 Student

**Paul McCormack**  
*BSc (Hons) Software Development for Business*



Thales  
Best Level 3 Student

**Joao Vasconcelos**  
*BEng (Hons) Computer-Aided Mechanical Engineering*



Trades House of Glasgow  
Best Level 3 Student

**Cade Evans**  
*BSc (Hons) Building Surveying*



# Professional Body Prizes

CABE  
Student Building Engineering Award



**Martin McLeod**  
*BSc (Hons) Environmental Civil Engineering*

CIBSE  
CIBSE Scotland Student Award



**Callum Taylor**  
*BEng (Hons) Building Services Engineering*

Chartered Institute for IT  
Best Level 4 Student



**Stanislava Zarkova**  
*BSc (Hons) IT Management for Business*

CIOB  
Prize for Top Management Student



**Hayley Clayton**  
*BSc (Hons) Building Surveying*

Chartered Institute for IT  
Best Level 4 Student



**Adam Don**  
*BSc (Hons) Computing*

CIOB  
Certificate of Excellence Prize



**Rowan Ann Morrison**  
*BSc (Hons) Quantity Surveying*

Chartered Institute for IT  
Best Level 4 Student



**Daniel McKain**  
*BSc (Hons) Software Development for Business*

CIOB  
Certificate of Excellence Prize



**Callum Robert John Bain**  
*BSc (Hons) Building Surveying*

Chartered Institute for IT  
Best Level 4 Student



**Matthew McKechnie**  
*BSc (Hons) Cyber Security and Network*

CIOB  
Certificate of Excellence Prize



**Cameron Daniel Bowie**  
*BSc (Hons) Construction Management*

Chartered Institute for IT  
Best Level 4 Student



**Maghrik Markarian**  
*BEng (Hons) Computer Networking*

Institution of Civil Engineers  
Institution of Civil Engineers Prize



**Daniela Fomina**  
*BSc (Hons) Environmental Civil Engineering*

Chartered Institute for IT  
Best Level 4 Student



**Ross Curran**  
*BEng (Hons) Digital Security and Forensics*

Institution of Structural Engineers  
Top Structural Engineering Student



**Haihong Li**  
*BSc (Hons) Civil Engineering*

CI Arb  
Top Student in Dispute Resolution



**Cameron Peacock**  
*BSc (Hons) Quantity Surveying*

Joint Audio Media Support Group  
Outstanding Achievement Award



**Paul Hawthorne**  
*BSc (Hons) Audio Technology*



British Geotechnical Association  
Scottish Geotechnical Group Prize



**Keir Joseph Stanton**

*BSc (Hons) Environmental Civil Engineering*

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The Institute of Measurement and Control  
Best Project Award



**Akachi Oddy Oji**

*MSc Applied Instrumentation and Control*

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The Institution of Engineering and Technology  
Prize for Top Management Student



**Michael Jeans**

*MEng Electrical and Electronic Engineering*

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The Institution of Mechanical Engineers  
Frederic Barnes Waldron Award



**Thomas Hugh Burgess**

*BEng (Hons) Mechanical Systems Engineering*

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The Institution of Mechanical Engineers  
The Best Student Certificate



**Erin Rooney**

*BEng (Hons) Mechanical Systems Engineering*

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The Institution of Mechanical Engineers  
The Institution Project Award



**Andrew Hall Leggate**

*BEng (Hons) Mechanical Systems Engineering*

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The Institution of Mechanical Engineers  
The Best Project Certificate



**Mark Ferguson McLaughlan**

*BEng (Hons) Computer Aided Mechanical Engineering*

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The Institution of Engineers in Scotland  
Best Student Award



**Reece Manson**

*BEng (Hons) Computer Aided Mechanical Engineering*

The Institution of Engineers in Scotland  
Best Student Award



**Anna Halliday**

*BEng (Hons) Mechanical Systems Engineering*

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The Institution of Engineers in Scotland  
Best Level 4 Student



**Connor Small**

*BEng (Hons) Computer Aided Mechanical Engineering*

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The Institution of Engineers in Scotland  
Best Level 4 Student



**Joshua Graham**

*BEng (Hons) Mechanical Systems Engineering*

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The Institution of Engineers in Scotland  
Best Level 4 Student



**Darren Mackay**

*BEng (Hons) Electrical Power Engineering*

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The Institution of Engineers in Scotland  
Best Level 4 Student



**Mandeep Kumar Jason Ginda**

*BEng (Hons) Mechanical & Power Plant Systems Engineering*

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Worshipful Company of Firefighters  
Best Fire Risk Engineering Dissertation



**Katharine Skinner**

*BEng (Hons) Fire Risk Engineering*

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# STEAM Fund

The STEAM Fund was established in 2019 with a founding gift from graduate and honorary graduate Dr Douglas Dawson, to help widen access and diversity into Science, Technology, Engineering, Arts and Maths related programmes at Glasgow Caledonian. Each year the Fund is given a boost via our Industry Prize Donors who contribute a further £250, or more, on top of their annual student award.

Through scholarships and outreach we want to encourage pupils from all sections of society to consider a STEAM career. Each year the University dedicates staff time and funding to help widen access and inclusivity to the sector via projects including:

1. Primary Engineer - bringing engineering and engineers into primary classrooms and curriculum.
2. Smart STEMs: raising aspirations and promote career options among 11 to 14 year olds.
3. Teachers day: helping teachers in their science and technology teaching.
4. STEAM careers days in schools promoting the exciting range of careers available.
5. Inspire and Headstart Programmes with the Engineering Development Trust - three-day residential programmes for girls and boys aged 15 - 17 years.

This year, thanks to our generous prize donors, a further £5,000 has been raised, providing vital funds that will significantly enhance the work already being undertaken by the School to encourage a more diverse and inclusive talent pipeline.

This year's support will once again be directed to the STEAM Summer Camp, an inspiring three-day residential programme targeted at pupils in S4 and S5. Providing unique opportunities to learn about STEAM disciplines and develop problem solving skills, pupils will also participate in practical workshops on how to build a bridge and program a vehicle.

This funding will allow us to offer significantly more places to pupils at partner schools within the University's flagship outreach programme, the Caledonian Club, who partner with communities in Glasgow where there is low or no uptake to higher education.

To find out more about the STEAM Fund, or others way to support and engage with our students, and the University, contact the GCU Foundation via [foundation@gcu.ac.uk](mailto:foundation@gcu.ac.uk).



Local pupils engaging in STEAM activities as part of GCU's commitment to gender equality.



Engineering students, with the help of primary schoolchildren, have designed and manufactured the world's first mobile luge ramp.



# STEAM Summer Camp

Highlights from the 2022 STEAM Summer Camp.



Pupils proudly display their final bridge building projects alongside SCEBE staff and student mentors.



Bridge constructed by STEAM Camp pupils.



SCEBE staff support pupils learning experience.



Pupils take part in an egg drop challenge.



Learning new design skills.



