

SCHOOL OF COMPUTING SCIENCE & DIGITAL MEDIA



UNDERGRADUATE COURSE GUIDE 2018

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WHY THE SCHOOL OF COMPUTING SCIENCE AND DIGITAL MEDIA?

Excellent Career Prospects: We involve the IT and other major industries in the design of our courses, ensuring that you will be well equipped for work and that your degree meets the needs of your future employers.

Key Skills:

Our computing courses are designed to allow you to gain valuable transferable skills such as team working, project management and communication. You will gain a balance of theory and practical hands-on experience throughout your studies.

Top University: We are the top university in Scotland for graduate prospects (Guardian University Guide 2017).

Flexible Options: Our 4 year courses share many modules in the first year, giving you a solid grounding in computing and, crucially, offering you the flexibility to change to another computing course as your studies progress.

Professional Recognition: Our computing courses are accredited by the British Computer Society

(BCS), so that successful completion of an accredited degree enables graduates to apply for membership of the BCS and achieve chartered status providing valuable additional professional recognition.

Direct/Advanced Entry:

If you have an HNC or HND, you may also be eligible for our Direct Entry option. If you have Advanced Highers or similar qualifications, you may be eligible for our Advanced Entry option.

Vital Industrial Experience:

During your studies, you have the option of seeking a suitable work placement, giving you a valuable opportunity to put your learning into practice and enhance your employability.

Supportive Environment: We offer you the chance to study in a friendly and supportive School community.

SCHOOL OF COMPUTING SCIENCE AND DIGITAL MEDIA

Situated in the modern Sir Ian Wood Building at the Garthdee campus, the School of Computing Science and Digital Media provides a state-of-the-art, purpose-built environment. This is the perfect place to study current professional practice in software development, interactive digital media, cyber security, network and systems design and the management of computing technologies. You will learn practical and creative problem-solving skills using emerging technologies and apply these to the challenges faced by industry. From the technical emphasis of Computer Science to the creative opportunities of Digital Media our courses equip you with valuable personal and professional skills, and a career enhancing qualification.

We encourage students to form their own ventures, run their own societies and develop their innovative skills to expand their horizons beyond the taught curriculum. Recent students have launched their own businesses, undertaken commercial projects in parallel with their studies, published research papers at international conferences and performed extremely well in national competitions. There are currently two Computing student-led societies to expand the opportunities available.

PRACTICAL AND PROFESSIONAL

Studying computing is about much more than 'just' programming; it is a creative, practical, problem-solving subject. You will gain an understanding of how computing technologies work and how you can develop creative and commercial solutions that improve business efficiency and enhance people's daily lives with improved access to information and data systems security.

Choosing a computing degree means working towards a career-enhancing qualification and gaining valuable and relevant professional skills.

The newly developed offering of Graduate Level Apprenticeships* (a programme through Skills Development Scotland), whereby students are employed by collaborating organisations as apprentices while studying toward a degree, further increases the range of learning options.



OUR COURSES

Computer Science	6
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SHARED FIRST YEAR

Our first year students study many modules which are shared between the different courses and which build the solid foundation of knowledge and understanding that is needed for later specialist study.

Throughout the year, a blend of lectures and practical exercises, delivered in our state-of-the-art labs will quickly build confidence in your ability to master the subject. You will start to develop the technical skills needed to design and build software using a variety of programming languages, and apply these techniques to your chosen area of study. In addition, group project work will develop the personal, team working and communication skills that employers demand of you.

The innovative, practical and investigative approach to teaching and learning provided by the first year will equip you with the lifelong learning skills you need for a successful career in a rapidly changing technological world. As your knowledge of computing expands and your awareness of future career pathways develops, our Year 1 course structure has the flexibility to allow transfer between the courses taught within the School of Computing Science and Digital Media.

WHAT YOU WILL STUDY

THE FIRST YEAR PROGRAMME FOR THE UNDERGRADUATE DEGREES ALLOWS STUDENTS TO INVESTIGATE VARIOUS ASPECTS OF COMPUTING AND DIGITAL MEDIA TECHNOLOGIES. THERE IS A COMMON CORE SET OF FIRST SEMESTER MODULES WITH SPECIALISATION IN THE SECOND SEMESTER.

Computer Science and Cyber Security

- Introduction to Computing
- Computing Information Systems
- Problem Solving and Modelling
- Computer Systems and Networking
- Object Oriented Programming

Digital Media

- Introduction to Computing
- Computing Information Systems
- Problem Solving and Modelling
- Digital Media Design
- Digital Graphics Techniques

The modules quoted in this description are currently available for study. However, as we review the curriculum on a regular basis, the exact selection may change over time.

ENTRY REQUIREMENTS

COMMON TO ALL EXCEPT COMPUTING: APPLICATION SOFTWARE DEVELOPMENT, COMPUTER NETWORK MANAGEMENT AND DESIGN AND GRADUATE LEVEL APPRENTICESHIP (ALL COURSES)

SQA Higher

BBBC and two further passes to include English and Maths at National 5 level Grade C or above.

Applicants who have successfully completed two Advanced Highers (or equivalent), including Computing and another numerate subject, may be eligible for entry into Year 2 of our courses.

GCE A Level

BCC and two further passes to include English and Maths at GCSE Grade 5 if not held at A Level.

Irish Leaving Certificate Higher
H2H3H3H3 and two further passes to include English and Maths at O3 or above if not held at Higher.

IB Diploma

27 to include a pass in Standard Level English and Maths Grade 4 or above.

Applicants from Partner Colleges

A relevant HND from one of our partner colleges will be considered for entry into Year 3.

Advanced Entry

All other applicants who are interested in applying for advanced entry will be considered on an individual basis.

COMPUTER SCIENCE

BSC (HONS) UCAS G400

Our Computer Science degree provides you with a balance of the state-of-the-art knowledge and skills that are needed to design and implement sophisticated software systems to solve the most challenging problems posed by industry.

The course is designed to equip you for a career at the cutting edge of software development or graphics and animation. There is a strong emphasis on programming modern computing platforms, ranging from embedded systems to mobile, desktop, graphics and cloud computing environments.

Your degree will be highly prized by employers and will form the basis for a career as a professional software developer who can work effectively on a wide range of modern computing platforms.



WHAT YOU WILL STUDY

You will study object-oriented software design, learn systems development skills and have the opportunity to apply your knowledge and skills to solve technically demanding problems throughout all stages of your course.

Year 1

Your first year will introduce you to the creative, practical and intellectual skills you will need as a computing professional. You will learn skills in problem solving and modelling skills in collaborating with others as part of a team, skills in software design and development and an understanding of how information technology is used in industry.

Year 2

Modern Computing entails development on a wide range of processing platforms. This year you will study modules that reflect this variety of target devices, including advanced software development techniques, dynamic web development, database systems and computer networks. At this stage you will learn how to address the professional, legal, social and ethical aspects of Computer Science. You will also take part in our real world project module where you will design, implement and test a solution to a real problem provided by research or industry.

Year 3 Industrial Placement

A key feature of this course is the option to seek a year long placement in industry, usually between year 2 and year 4 (or, less commonly, between year 3 and year 5). There is also an opportunity to take placement over the summer either at the end of year 2 or year 4.

Year 4

This year introduces more advanced programming concepts including modern programming paradigms and software engineering, whilst allowing you to develop new skills in areas such as web security, operating systems and mobile application development. This year allows you to choose between our Computer Science and Computer Graphics streams. This enables you to decide whether to develop as a core programmer in areas such as big data analytics or specialise in graphics development.

Year 5

The Honours year provides you with the opportunity to develop advanced skills in Artificial Intelligence and programming while also covering current real-world topics such as the enterprise development. For core programmers Network Security, covering aspects of ethical hacking, and Cloud Computing will give you an understanding of developing and securing modern software systems. Graphics students will study topics such as 3D Modelling and Games programming.

The Honours Individual Project is a major feature of this year, and it gives you an opportunity to integrate and apply the knowledge and skills you have learned in the course to a large, self-directed project.

ENTRY REQUIREMENTS

SQA Higher

BBBC and two further passes to include English and Maths at National 5 level Grade C or above. Applicants who have successfully completed two Advanced Highers (or equivalent), including Computing and another numerate subject, may be eligible for entry into Year 2 of our courses.

GCE A Level

BCC and two further passes to include English and Maths at GCSE Grade 5 if not held at A Level.

Irish Leaving Certificate Higher

H2H3H3H3 and two further passes to include English and Maths at O3 or above if not held at Higher.

IB Diploma

27 to include a pass in Standard Level English and Maths Grade 4 or above.

Advanced Entry

Applicants who are interested in applying for advanced entry will be considered on an individual basis

Study Options

Full-time: 4 years or 5 years (depending on placement).

CYBER SECURITY

BSC (HONS) UCAS I100

Our Cyber Security degree provides you with the knowledge and skills to secure and protect critical information systems to the high professional standards demanded by industry.

You will study the different ways that computer software and hardware systems can be vulnerable to attack and gain practical skills in how to defeat malicious threats. This will form the basis for a career as a professional cyber security specialist who can work effectively to protect critical systems from being compromised by internal and external threats.

The course, with its strong emphasis on practical security applications, is designed to equip you for a career at the forefront of developments in cyber security.

PLACEMENT

You have the opportunity to undertake a one-year placement in industry as part of the course. The confidence and experience you will acquire during a placement will make you more employable and put you one step ahead of the competition when you graduate. See page 25 for more details.

WHAT YOU WILL STUDY

The course aims to provide you with a balance of theoretical knowledge and practical skills with which to understand the threats to software and hardware systems. You will learn how to secure those systems to a professional standard and to recover from cyber attacks. Topics that you will study within the course include web and database security, penetration testing, ethical hacking, and digital forensics. You will also have the opportunity to gain industry-approved professional certification in networking and security externally to augment your honours degree.

Year 1

Your first year will introduce you to the creative, practical and intellectual skills you will need as a computing professional. You will start to gain an understanding of computer networks and the security problems that affect hardware systems. You will also learn skills in problem solving and modelling in a computing environment, skills in collaborating with others as part of a team, skills in software design and development and an understanding of how information technology is used in industry and commerce.

Year 2

Cyber security requires a deep knowledge of many aspects of computer science ranging from network management and security to software development. This year you will

study modules that build up your expertise in these areas, as well as give you the opportunity to practice your skills in the context of real-world problems. You will continue to acquire expertise in computer networks as well as developing your professional skills through problem-based learning. You will also continue to gain an understanding in key programming concepts such as object oriented software development, and database systems.

Year 3

This year focuses on security in a range of different digital environments including wired and wireless networks. You will learn how to manage and protect these networks and how to securely store and protect data from threats and breaches. You will learn about security models in operating systems as well as practical elements of cryptography, database and web security. You will also study computer law and ethics, as well as extending your knowledge of core networking concepts. Many of the activities at this stage are undertaken in the context of real-world projects, which develop your skills in project management and team working, as well as critical problem solving skills in IT systems analysis and design.

Year 4

The Honours year provides you with the opportunity to gain expertise in advanced security topics such as ethical hacking, digital forensics and penetration testing. You will also develop advanced skills in the management and security of networks and study the threats posed by malicious software. The Individual Honours Project is a major feature of this year, and it gives you an opportunity to integrate and apply the knowledge and skills you have learnt in the course to a large, self-directed project.

ENTRY REQUIREMENTS

SQA Higher

BBBC and two further passes to include English and Maths at National 5 level Grade C or above. Applicants who have successfully completed two Advanced Highers (or equivalent), including Computing and another numerate subject, may be eligible for entry into Year 2.

GCE A Level

BCC and two further passes to include English and Maths at GCSE Grade 5 if not held at A Level.

Irish Leaving Certificate Higher

H2H3H3H3 and two further passes to include English and Maths at O3 or above if not held at Higher.

IB Diploma

27 to include a pass in Standard Level English and Maths Grade 4 or above.

Advanced Entry

Applicants who are interested in applying for advanced entry will be considered on an individual basis.

Study Options

Full-time: 4 years or 5 years (depending on placement).

DIGITAL MEDIA

BSC (HONS) UCAS PI31

Digital Media brings together elements of design, production and multimedia development to provide an exciting future for our talented and innovative graduates. Combining creative design skills with a high level of technical ability ensures that employers are gaining the graduates they require to contribute to the success of their companies. The course will provide you with the knowledge and practical skills to start with a client brief and take your design concepts through to practical implementation.

This course covers four main themes of design, human computer interaction, web and digital media, all of which are underpinned by technical and professional skills in web development, creative 2D and 3D graphics and animation, video and visual effects. The skills you will gain in this course will equip you for employment in many different areas, including game and film industries, training and education, data visualisation, advertising agencies and social media, mobile application and website development.



WHAT YOU WILL STUDY

Year 1

In the First Year, you will develop your skills in digital media design and production as well as enhance your abilities in web design, problem solving and modelling, and working in a collaborative and professional environment.

Year 2

You will enhance your design skills by studying design principles from client brief to development, creating highly interactive applications in a range of contexts incorporating 2D graphics and animation.

Industrial Placement

A key feature of this course is the option to seek a placement in industry, either between year 2 and year 3 or between year 3 and year 4. This placement can take place over the summer or run for a full year. See page 25 for more details.

Year 3

You will expand your design and development skills into 3D graphics modelling to deliver expressive digital media solutions across a range of devices. Large scale group projects will provide key skills in project management applied to problems in an industrial context.

Year 4

Your final year focuses on a self-directed individual project in your chosen specialist area, as well as skills in 3D animation, audio and video production and effects, and developing media-rich mobile Apps.

ENTRY REQUIREMENTS

SQA Higher

BBBC and two further passes to include English and Maths at National 5 level Grade C or above. Applicants who have successfully completed two Advanced Highers (or equivalent), including Computing and another numerate subject, may be eligible for entry into Year 2 of our courses.

GCE A Level

BCC and two further passes to include English and Maths at GCSE Grade 5 if not held at A Level.

Irish Leaving Certificate Higher

H2H3H3H3 and two further passes to include English and Maths at O3 or above if not held at Higher.

IB Diploma

27 to include a pass in Standard Level English and Maths Grade 4 or above.

Applicants from Partner Colleges

A relevant HND from one of our partner colleges will be considered for entry into Year 3.

Advanced Entry

All other applicants who are interested in applying for advanced entry will be considered on an individual basis.

Study Options

Full-time: 4 years or 5 years (depending on placement).

COMPUTER NETWORK MANAGEMENT & DESIGN

BSC (HONS) UCAS H620

The course aims to equip students to work as professional engineers and consultants in the design, configuration and management of computer networks. The main focus is on the underlying principles and practice of computer and data networks. The course format has been designed to meet the requirements of applicants who already possess an appropriate HND, by providing a two-year programme of advanced study leading to an Honours degree.

The course will equip you with the essential skills not only to be able to design and implement networks, but also manage them effectively and ensure that the people using them benefit from their full potential. You will learn how to manage, design, implement, configure, and operate secure networks to the professional level demanded by business and industry.

PLACEMENT

You have the option to seek a one-year or 6-month placement in industry as part of the course. The confidence and experience you will acquire during a placement will make you more employable and put you one step ahead of the competition when you graduate. (See page 25 for further details on placement opportunities).



WHAT YOU WILL STUDY

The course includes a mix of network technology, project management and security modules, as well as opportunities for gaining practical skills in network configuration and network management. The main emphasis is on the installation, operation and maintenance of secure computer networks used in business and industry. It will also provide students with, where necessary, an opportunity to complete the Cisco CCNA Routing and Switching and Cisco CCNA Security training programmes.

Year 3

The core of this year focuses on studying network design and management, as well as network protocols and advanced system administration. Many of the activities are done in the context of projects, which develop your skills in project management and team working, as well as critical problem solving skills in network systems design and analysis.

Year 4

The Honours year provides you with the opportunity to focus on areas of special interest, including, virtual systems support, the development of secure fully converged networks as well as the utilisation of modern data communication technologies for building networks that are scalable, efficient, and can fully support a distributed IT infrastructure. The Honours Individual Project is a major feature of this year, and it gives you an opportunity to integrate and apply the knowledge and skills you have learnt in the course to a large, self-directed project.

ENTRY REQUIREMENTS

HND Computing: Technical Support qualifications with Cisco CCNA Routing and Switching modules 1 and 2 from partner FE Colleges will be considered for entry into year 3, as well as the HND project module passed at grade B or better..

Students not from partner colleges, with a HND or equivalent qualification who can show suitable exposure to network technologies may also be considered.

Study Options

Full-time: 2 years (with option to seek placement in semester 2 of year 3 and/or semester 1 of year 4).

COMPUTING (APPLICATION SOFTWARE DEVELOPMENT)

BSC (HONS) UCAS I310

This course has been designed to meet the aspirations of applicants who have completed a relevant HND in Computing and now want to follow a two-year programme of advanced study leading to an Honours degree.

The course will extend your existing skills in software and systems development and equip you with in-depth knowledge of web and mobile development, enabling you to design and implement sophisticated applications that meet demanding end-user and organisational requirements.

Software development topics are complemented by coverage of mobile development, web-based development and systems development to ensure that you have the knowledge and proficiency in the tools and technologies needed to develop accessible, interactive solutions that achieve a high level of client satisfaction.

One of the major challenges facing industry and commerce today is maintaining and enhancing a competitive advantage. The convergence of communication and information technologies is creating new opportunities for the development of application software that integrates mobile, tablet, PC, security and an array of computing services into highly accessible enterprise scale systems. The course content covers the full range of software technologies that underpin these opportunities.



WHAT YOU WILL STUDY

Year 3

This year focuses on developing your technical analysis and design skills applied to information systems and software applications. You will develop applications for a range of browsers, operating systems, and devices. You will learn skills in modern web development, software for mobile devices and artificial intelligence.

Many of the activities are done in the context of projects, which develop important skills in project management and team working as well as extending your programming and problem solving skills. These skills will help ensure that your software applications meet the real needs of users and business organisations.

Industrial Placement

A key feature of this course is the option to seek a placement in industry between Year 3 and Year 4. This placement can take place over the summer or run for a full year.

Year 4

The Honours year provides you with knowledge and skills in more advanced areas of modern computing. Topics such as Cloud Computing and advanced Artificial Intelligence allow you to develop sophisticated software while topics such as the Artificial Intelligence and Web Security introduce real world techniques in modern computing.

The Honours individual project is a major feature of this year, and it gives you an opportunity to integrate and apply the knowledge and skills you have learned in the course to a large, self-directed project in an area of special interest to you.

ENTRY REQUIREMENTS

Applicants from Partner Colleges

A relevant HND from one of our partner colleges will be considered for entry into Year 3.

Advanced Entry

All other applicants who are interested in applying for advanced entry will be considered on an individual basis.

Study Options

Full-time: 2 years, or 3 years (depending on placement)



Corrie Green (3rd year CASD) (centre) is presented with his award by Thierry Bedos, VP Technology at hotels.com (left) and Fiona Bruce (right)

COMPUTING UNDERGRADUATE OF THE YEAR

Our students are encouraged to compete in external events and competitions such as Hackathons, Code Jams and Cybercamps. The technical and real world problem skills we teach equip students to be able to apply their knowledge to these different types of challenges and environments.

In 2016, Corrie Green (19), a third year student from the School, was awarded the TARGETjobs Computer Science and Analytics Undergraduate of the Year. To qualify for the final, Corrie first had to

complete a series of online tests before travelling to London to take part in an assessment centre session and interview with award sponsor Expedia. He impressed the company so much that they invited him for a three month internship, as well as spending a week in Expedia's head office in Seattle. The TARGETjobs Undergraduate of the Year Awards is a UK wide competition which aims to celebrate the best undergraduate students at UK universities and looks for a combination of academic excellence, the ability to pass difficult online assessments and good communication and interpersonal skills.

SUPPORTING YOU

FIRST YEAR SUPPORT

As a student in the School of Computing Science and Digital Media, you will be well looked after. We offer multiple avenues of support, including a team of dedicated Foundation Year Coordinators who organise social events throughout the year, and are also available for weekly pastoral drop-in sessions. Foundation Year Coordinators form a large part of your first year teaching team. Their aim is to help you throughout your first year at university and to be a friendly point of contact for any issues that you are facing. They will help you adapt to university life and guide you on your way to an exciting future.

COMPUTING ACADEMIC SUPPORT CENTRE

Members of teaching staff are available throughout the week within the Computing Academic Support Centre (CASC). At CASC, students can request additional support and clarification on taught material in the form of free drop-in sessions.

FOSTERING TEAM SPIRIT

The transition into university life can be a big one. In the School of Computing Science and Digital Media, we work as hard as we can to make that transition as smooth as it can possibly be. A career within computer science or digital media often involves work within multi-disciplinary groups, consisting of designers, developers and business partners. Adopting this ethos, first year students work in groups and strive to accomplish problem-based goals.

PROBLEM-BASED LEARNING

First year groups face challenges within these teams that are developed around problem-based learning. Within problem-based learning, students learn about a subject through the experience of solving an open-ended problem. This allows our first years the chance to both learn about the material and develop stronger team dynamics and thinking strategies.



"My course allowed the opportunity to learn multiple languages such as Java, Visual Basic, C++ and Objective-C. With a focus on graphical elements we were also able to try our hand at 3D modelling, learning about the graphics and how to create them ourselves."

Adam Gall, Computing for Graphics and Animation graduate

TALK TO OUR STUDENTS ON FACEBOOK,
VISIT WWW.FACEBOOK.COM/ROBERTGORDONUNIVERSITY

STUART WHITEHEAD

COMPUTER SCIENCE GRADUATE

What career have you gone into after graduation?

I've always had an interest in the design industry - the thought of helping people, businesses or the wider society to achieve a goal is very appealing. I've also found that software engineers are invaluable in achieving a design vision.

I've been very fortunate to be working for a design led digital company called Springload in Wellington, New Zealand. My role as a developer sees me building complex user interfaces, back-end server applications and supporting server management and operations.

Why did you choose to study your course?

This was a straight-forward decision for me - computing has been my passion for as long as I can remember. The computing industry is also very vibrant. It's developing at an incredible pace meaning that there is a continuing demand for qualified, knowledgeable workers.

Why did you choose to study at RGU?

I knew that I wanted to study in Scotland, and so I compared the offerings of many Scottish universities. I chose to study at RGU for two main reasons. Computer Science is a modern topic and RGU is a modern university - I liked the practical approach to learning which the RGU course took. I also appreciated the benefit of an industry placement, which RGU supports as a component of the course. I undertook a

year-long placement at what is now brand and design agency FortyTwo Studio. I learnt a lot during my time with the team and it helped to forge my career.

What piece of advice would you offer to other students?

Follow your passion. If you follow your passion and are motivated to study a subject, everything else will fall into place.

Tell us about your project and your prizes

After completing my degree in Computer Science, I decided to continue on to the honours year. A main component of this year is a major software development project on a topic of your choice. My project was focused on the Internet of Things, a new computing paradigm where everyday physical objects are gateways to digital services.

My project won the Servelec Controls Award for Best Honours Project in Software Engineering at RGU. I was subsequently nominated for entry to the ScotlandIS Young Software Engineer of the Year award, and to my delight, was named overall winner. I think this was validation of the research topic and the effort which I put into it. It's also made me confident to dive headfirst into my career.



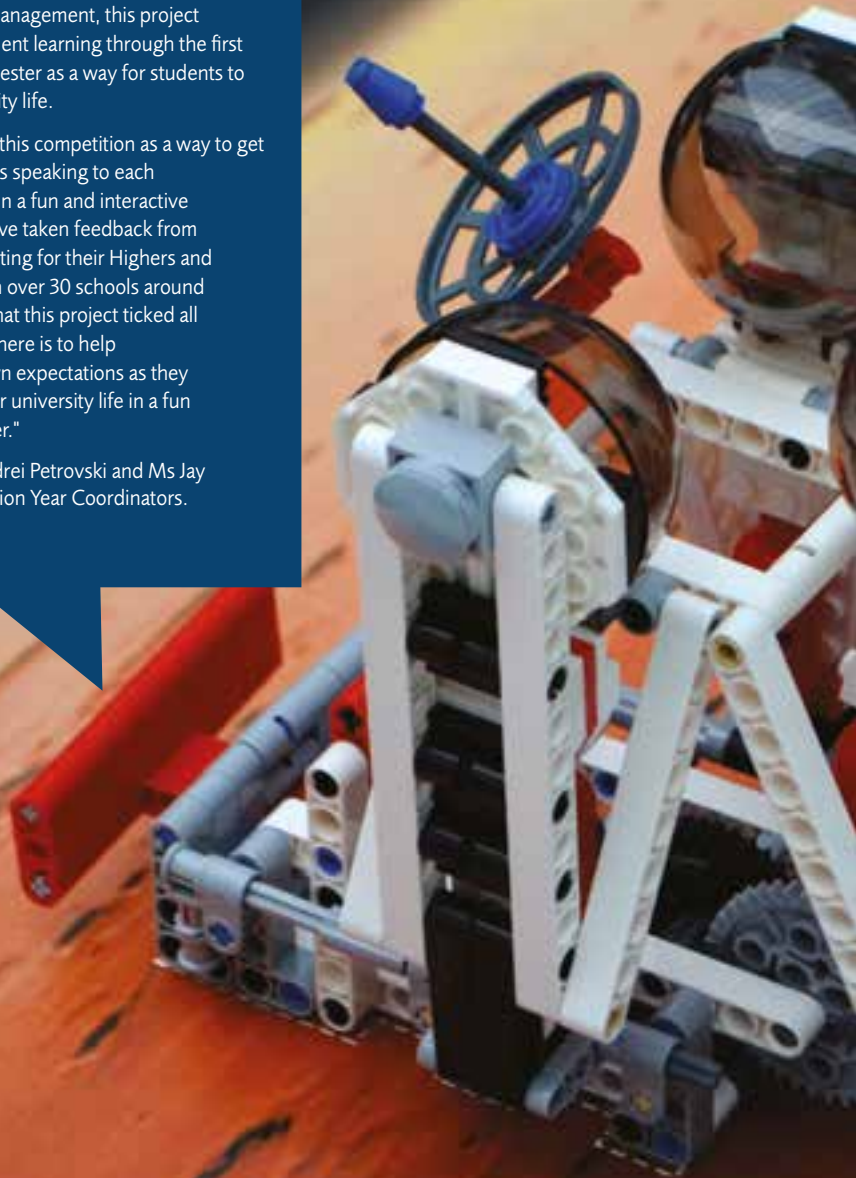
LEGO TEAMWORK COMPETITION (YEAR 1)

All first year students are required to work together in interdisciplinary groups to design, program and develop robots using 'LEGO Mindstorms' of their own design, and create a brand for their team.

Whilst this project is used to teach soft skills such as teamwork and time management, this project encourages independent learning through the first few weeks of the semester as a way for students to acclimatise to university life.

"We have developed this competition as a way to get our first year students speaking to each other from day one, in a fun and interactive environment. We have taken feedback from over 600 students sitting for their Highers and Advanced Highers in over 30 schools around Scotland to ensure that this project ticked all the boxes! Our goal here is to help students set their own expectations as they move forward in their university life in a fun and engaging manner."

Dr Mark Zarb, Dr Andrei Petrovski and Ms Jay Lytwynenko, Foundation Year Coordinators.



WHERE CAN IT TAKE ME?

A degree in computing prepares you for a wide range of careers. It shows that you are a logical thinker, have sound technical, organisational and management skills and a creative imagination. These are highly valued attributes in any profession. The software industry is a popular destination for many of our graduates; however, you will find a wide range of opportunities in virtually every sector of the UK economy and in the global economy beyond.

Our graduates have progressed to roles including:

IT Audit Associate, Ernst & Young

Knowledge Network Manager, Wood Group

Software Integration Engineer, Saab Systems

Software Engineer, ODS-Petrodata

Master Support Integration Engineer, Hitachi

IT Consultant, CGI Group

Senior Systems Engineer, Wipro

Multimedia Developer, Atlas Interactive

Systems Integration Engineer, Talisman Energy

Systems Engineer, Lockheed Martin

Project Manager, ConocoPhillips

Multimedia Developer, Scottish Agricultural College

Digital Graphic Artist, Halliburton

Business Improvement Manager, Rio Tinto Alcan

Pipeline Technical Director, Sony Pictures Imageworks, Canada

Senior UI Designer, Frontier Developments, Cambridge

Lead FX Artist, DHX Media, Canada

Mid Weight UI Designer, Sky, London

"I took part in a year long placement at Talisman Energy. First of all I was placed in a Helpdesk, where I had to work as part of a team performing typical troubleshooting and PC advice. After 6 months I was moved to Desktop Support, where I had to deal with hardware and software related issues, which led me on to a job with Maersk Oil."

Colin Dawson

Accounts Manager, Independent Data Services

WELL CONNECTED

Our School's close industry links are vital; these ensure that you will gain a relevant qualification that meets your future employers' needs. Many of our staff work in conjunction with commercial partners to apply our leading edge research. Recent projects have been with organisations such as Petrodata, Fugro, Tata and ConocoPhillips. This work helps to inform our degree course design, and enriches your learning experience by providing live case studies and projects for you to engage with.

GUEST LECTURERS

A number of guest lecturers from companies such as CGI Group, TOTAL and IBM visit our School in order to share their expertise with you. Recent guests have also included:

Mary Vincent, founder and CEO of Green Star Solution, presented on the importance of innovation and green solutions in the IT industry.

Paulo Barone, from Microsoft, visited the School as part of The Microsoft Inspiration Tour. He presented on trends in web technology, from user interaction and rich internet applications to building scalable applications taking advantage of cloud computing.

SCHOLARSHIPS

The TOTAL Computing Scholarship is open to Year 2 Computer Science students. The Scholarship includes financial and mentoring support, as well as a work placement opportunity. For further information, please visit: www.rgu.ac.uk/scholarships

The Kongsberg Maritime Scholarship is also open to Year 2 Computer Science students. The Scholarship includes financial and mentoring support and as well as work placement opportunities. For further information, please visit: www.rgu.ac.uk/scholarships

PRIZE GIVING

Our School's annual prize giving event recognises and rewards student achievement across all of our courses. The event includes sponsored prizes from companies such as: Fugro Academy, Codify, ConocoPhillips, JFD Ltd, BP, CNOON Nexen, Sword IT solutions, Servelec Controls, BCS, CISCO, Developers for Hire Ltd and the Marcliffe Hotel.

HACKATHON

We encourage our students to take part in competitive coding events such as the recent Hackathon held at RGU. The students' challenge was to apply their technical skills and creativity to develop software products over a period of 24 hours. Some students chose to use physical computing platforms such as Arduino and Raspberry Pi, while others made use of large data sets such as those from NASA and Twitter. Others took on the challenge from the Scottish Institute for Enterprise (SIE) to produce software in areas such as Health and Wellbeing, Green and Sustainable energy resources and Smarter communities and infrastructure. The competition provided excellent opportunities for our students to meet up with others pursuing computing and IT courses at other universities and to gain experience of working in a software development team, creating something that was exciting and socially meaningful.



PLACEMENTS

All undergraduate students have the option of seeking a relevant summer or year-long placement in industry. Computer Network Management and Design students can go out on a credit-bearing placement for a year or for 6 months. A year placement will replace study during semester 2 of year 3 and semester 1 of year 4. For those students who do not secure a year placement, a 6-month placement may be possible. For all other courses, there is the option to seek either a short summer placement of 4-16 weeks or a year-long placement. Where students go out on placement for

a year, this will extend the length of their degree programme.

By undertaking a placement during your studies you will make valuable links with industry and have a definite advantage when you apply for graduate jobs. Some of our students have successfully secured placements in companies such as Marathon Oil, Servelec, Stena Drilling, Codify, GE, Total, TRAC International, DAI, KCA Deutag. Our dedicated Placement Office will support you in finding a placement.

"I did my placement at ConocoPhillips Aberdeen, Network Services department. It was very important for me to get a placement. It was not just to get my first work experience in the industry but also to get to know highly skilled engineers from the industry. In general, I have enhanced my skills not just in a technical way but also increased my confidence and understand the values of teamwork, which contributed to continuous improvement."

Robert Benedik
BSc (Hons) Computer Network Management and Design

"I took part in a 3 month summer placement at Fugro in its e-learning department, creating courses using a wide range of multimedia including flash animation and 3d modelling. After my placement I was offered a part time job with Fugro which has progressed to full time now that my university course has finished."

Katherine Woollett
Computing Graduate

YOUR LEARNING EXPERIENCE

We appreciate that you might not yet be sure which area of computing you wish to specialise in. We've designed our First Year with a large common component to give you both a solid foundation in computing and to allow you the opportunity to transfer between courses.

Your first year includes interactive lectures and tutorials combined with practical exercises to enable knowledge to be immediately absorbed. Throughout your degree, learning takes place in an environment where you have ample opportunity for interaction, questions, discussions, and sharing experiences, both with teaching staff and other students. Your assessments will take a variety of forms including practical assignments and examinations. Our subject assessments often place significant weight on coursework, projects and other evidence of your practical ability.

Whether you are joining us in First Year or as an Advanced/Direct entrant, you'll be assigned a personal tutor to support you throughout your studies. You'll be taught by our supportive and knowledgeable team of teaching staff, many of whom are active in research. Our internationally renowned research focuses on areas such as web search and recommender systems, data visualisation and image analysis, healthcare technologies, Big Data and internet of things.

FACILITIES

Our courses strike a balance between theory and practice. Practical application of ideas and concepts enables you to develop advanced skills in using software tools. As you'd expect, we have a wide variety of modern learning facilities to support this, including a green screen suite, a cyber security lab, a network management lab and render farm (a high performance computer cluster used to create computer generated imagery). You can view our facilities at:

www.rgu.ac.uk/computingfacilities

RGU COMPUTING SOCIETY

Our student society organises computing-related events to develop software skills. They organise and take part in computing competitions as well as leisure activities. The Society was recently presented with Lego Mindstorm robots, provided by our University's Alumni Fund.

STUDY ABROAD

You may wish to study part of your degree abroad to broaden your horizons and experience another culture. You can do this with one of our School's European partner institutions in France, Spain or Sweden. For more information, please visit: www.rgu.ac.uk/erasmus

"The best thing about the School is the professionalism of each member of staff and the modern facilities."

Alin Rohnean
Student

"I have enjoyed creative and practical design tasks; creating websites and animations, and letting loose my imagination."

Deborah Henderson
Student

WHAT NEXT?

THE NEXT THING TO DO IS TALK TO US.

We can answer any questions you may have. Simply call us on **01224 262728** or email ugoffice@rgu.ac.uk

We also provide a range of opportunities to visit us – so you can see what we can offer you, first-hand.

Open Days

For full information and to register, please go to www.rgu.ac.uk/openday

Visit Afternoons

If you are unable to attend an Open Day, come along to one of our monthly Visit Afternoons.

To register go to:

www.rgu.ac.uk/visitafternoons

Have you seen our current prospectus? This gives valuable additional information about student life in Aberdeen and the wider University. Request a prospectus or download it at:

www.rgu.ac.uk/ugprospectus

A CONSISTENTLY TOP-RATED UNIVERSITY FOR GRADUATE EMPLOYABILITY*

*HESA Destination of UK leavers' survey (DLHE) 2015/16. Published by HESA, July 2017

CONNECT WITH US

From sporting events to ground-breaking research and guest lectures to art exhibitions, there's so much going on at RGU it's important to keep up-to-date! By joining our social media network and checking out our tweets and posts you can do just that.



Read our student blog
WordPress
www.rgustudentblog.com



Join the conversation
Twitter
[/robertgordonuni](https://twitter.com/robertgordonuni)



See our beautiful campus
Instagram
www.rgu.ac.uk/instagram



Connect with your peers
Facebook
[/robertgordonuniversity](https://facebook.com/robertgordonuniversity)



Check out our pin boards
Pinterest
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Network and connect
LinkedIn
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DISCLAIMER

This publication is intended as a guide for applicants for courses delivered by Robert Gordon University. In compiling it, the University has taken every care to be as accurate as possible, and the information in this brochure is correct at the time of going to print.

To ensure the continued currency of its courses and, where appropriate, address the requirements of external advisors and associated professional, statutory or regulatory bodies, the University regularly reviews its courses, and implements changes to course content and/or structure.

The University makes reasonable endeavours to inform applicants and students at the earliest opportunity of any significant changes to, or suspension/cessation of, a course, particularly when this occurs between the offer of admission and enrolment.

Significant changes may include (but are not limited to) changes to:

- an existing course title or named exit awards;
- the course curriculum/modules (e.g. replacement of core and/or optional modules);
- the course structure (e.g. addition of a placement year, changes in clinical hours, changes related to professional, statutory or regulatory body accreditation);
- additions/changes to mode(s) of delivery;
- methods of assessment;
- suspension or cessation of a course.

Reasonable efforts will be made to assist applicants find an alternative RGU course if the original is no longer suitable.

CONTACT US

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