ENGINEERING, DESIGN AND CREATIVE INDUSTRIES
CONTENTS
Engineering and Digital Technology Park 3
Our People 6
Our Courses 8
Integrated Foundation Year 9
STEAM at the University of Chichester 10
Working with Industry 13
Engineering & Materials 15
Electronics & Electrical Engineering 19
Creative Science 23
Product Design 27
Film Production, Animation and Visual Effects 31
Media, Film and Television Studies 35
Screenwriting and Performance 39
Lights, Camera, Action 42
Engineering and Digital Technology Park

The Departments of Engineering and Design and Creative Digital Technologies will be based at our brand new Engineering and Digital Technology Park in Bognor Regis (due for completion in 2018).

At Chichester, we’re bringing together science, technology, engineering, arts, and mathematics (STEAM) courses under one roof to produce graduates with a wide set of skills who are equipped to enter the graduate workforce.

We pride ourselves on the quality of the learning environment we can offer our students. This state-of-the-art facility will house cutting-edge teaching labs containing brand new equipment and apparatus.
Engineering and Design
• A large, double height space for delivering engineering design-build-test experiences
• Practical project-orientated engineering workshop and teaching facilities
• Dedicated electronics and mechanics laboratories
• Fabrication laboratory
• Specialist 3D printers
• Facilities to teach Computer Aided Design
• Hands-on education spaces for partnerships with schools and colleges

Creative Digital Technologies
• 250 square-metre, three-storey high sound stage (one of only three in the UK capable of holding a professional orchestra)
• Dedicated 75 square-metre green screen stage for motion capture and chroma work
• Post production area consisting of nine edit suites alongside our ‘Soho’ standard dubbing & master suite
• Professional recording studios and live room
• Screening theatre
• Mac and PC editing suites (including a wide range of industry standard creative software packages)
• Ideas labs
Our students have access to a broad range of disciplines, academics and researchers.

**Nader Anani, Head of Electronics & Electrical Engineering**  
Dr Nader Anani is an active researcher and chairs international conferences on the latest innovations in smart technologies and sustainable energy.

**Stephen Baysted, Professor of Film, TV and Games Composition**  
Stephen Baysted, a professional composer and audio director, has scored many games, feature films, TV series and advertisements.

**Fleur Costello, Senior Lecturer**  
Fleur has over twenty years’ experience in Film and Television. She has written feature films, broadcast TV drama, documentaries and sit coms.

**Steve Couch, Senior Lecturer**  
Steve Couch has over 30 years of international experience in all aspects of broadcast and was Emmy-nominated for his editing of BBC Horizon’s Dawn of Man.

**Thomas H Green, Senior Lecturer**  
Thomas H Green has been a working journalist for over twenty years. Specialising in popular music and film, he currently writes for publications including the Daily Telegraph and is a Content Strategist for Napster.

**Michael Holley, Head of Department, Creative Digital Technologies**  
Michael, a former freelance writer/producer/director, has broadcast credits as a director on short form factual content, a screenwriter for BBC Drama, and as producer of internationally successful short films.

**Cliff Harden, Senior Lecturer**  
With a career spanning 29 years, Cliff has shot feature films, short dramas, commercials, music promos and documentaries and can account for around 2000 hours of live transmission.
Stuart Harmer, Head of Department, Engineering and Design
Professor Stuart Harmer, an active researcher and Head of Department, has recently studied the interaction of light with sub-wavelength structures (for commercial use) and undertaken research on concealed weapons detection for the Met Police.

Catherine Harper, Deputy Vice-Chancellor
Professor Catherine Harper’s doctoral research developed three-dimensionally woven glass fibre preforms with high tensile strength and flexural rigidity performance for use in the automotive industry.

Seamus Higson, Deputy Vice-Chancellor
Professor Higson has more than 20 years’ experience of bringing fundamental research through to practical implementation and full commercialisation – based on technologies ranging from biomedical biosensors through to smart wound dressings and sensors.

Marzenna Hiles, Senior Lecturer
Marzenna has worked extensively as a script supervisor for film and television productions where her many credits include Stephen Poliakoff’s The Tribe and Peter Kosminsky’s No Child of Mine.

Adam Locks, Programme Coordinator of Media & Communications, Film & Television
Dr Adam Locks hosts the ‘Dept. of Media Presents’ series, interviewing key figures from television and cinema on campus.

His research interests include horror cinema and television, American television drama, exploitation cinema, and podcasting.

Darren Mapleton, Programme Coordinator of Digital Film Production and Digital Film Technologies
Prior to his academic career, Darren ran a successful independent film company and, as cameraman, director, and producer, worked on a range of factual, entertainment and drama programmes.

Howard Taylor, Head of Mechanical Engineering & Materials
Dr Howard Taylor, a metallurgist and experienced lecturer, works with industry and as an expert police witness in road traffic accidents.

Rosey Whorlow, Senior Lecturer
Rosey Whorlow’s work explores the relationship of various media to aspects of personal and political power, resistance and conformity. She has a keen interest in feminist research.

Ian Worden, Programme Coordinator of Sports Media
Ian Worden pioneered the Sports Media course and has research interests including sport and the media, advertising, Hollywood and British cinema, sports journalism, and cultural and critical theory.
Our Courses

Engineering and Design
- Integrated foundation year (taken with one our Engineering, Creative Science or Product Design degrees)
- BEng Mechanical Engineering & Materials
- MEng Mechanical Engineering & Materials
- BSc (Hons) Creative Science
- BEng Electronics & Electrical Engineering
- MEng Electronics & Electrical Engineering
- BA (Hons) Product Design
- BSc (Hons) Product Design
- BEng Product Design & Innovation
- MEng Product Design & Innovation
- BEng Biomedical Materials Engineering
- MEng Biomedical Materials Engineering
- BEng Sports Engineering
- MEng Sports Engineering

Creative Digital Technologies
- BA (Hons) Media & Communications
- BA (Hons) Film & Television Studies
- BA (Hons) Sports Media
- BA (Hons) Digital Film Production and Screenwriting
- BSc (Hons) Digital Film Technologies
- BSc (Hons) Creative and Digital Media
- BA (Hons) 3D Animation & Visual Effects
- BA (Hons) Screenwriting
- BA (Hons) Screenwriting and Creative Writing
- BA (Hons) Screen Acting & Creative Technologies
Integrated Foundation Year

Students without the correct entry qualifications for the BEng / MEng may access one of our Engineering, Creative Science or Product Design degrees via this course.

Science, Technology, Engineering and Mathematics (STEM) enable you to explore the fundamentals of the universe. You could uncover the science that underlies modern electronic devices; the design, testing and engineering that is required to develop an airliner; and the mathematics needed to express these amazing endeavours.

This integrated first year of study is ideal if you would like to explore these fields but don’t have traditional STEM A levels or BTECs, are returning to education or are changing careers. Many of our students lack confidence in mathematics and physics or don’t fit the stereotypical profile of an engineering student.

Students will sign up to this course as the first integrated year of one of our degrees.

What you’ll study
The broad and varied course is delivered through small, interactive seminars and tutorials as well as practical lab and build experiences which develop research, communication, team work and problem-solving skills.

As this integrated year leads to a range of diverse STEM degrees, it covers broad topics including: physics, mathematics, electronics and computing, and the practical application of these to engineering disciplines through design-build-test challenges. These practical CDIO (conceive-design-implement-operate) tasks offer students an opportunity to work in groups to combine their skills and solve real engineering problems. www.cdio.org
STEAM at the University of Chichester

At Chichester, we’re putting a little STEAM behind STEM. In other words we’re bringing together science, technology, engineering, arts and mathematics. Students in the Departments of Engineering and Design and Creative Digital Technologies will work collaboratively across their subject areas to produce graduates who have the range of skills needed to enter the world of work.

Our industry partners tell us that an employable graduate is one who has applied industry experience, exposure to cutting-edge research, and is able to move and flex across the engineering, technology and creative areas. As such, we work with industry to create an integrated approach to curriculum design and delivery and all of our courses include a balance of theory and practical work.
Working with Industry

All of our degrees are designed with employability in mind. As a student at Chichester, you have the benefit of being surrounded by a vibrant cultural and business hub.

Students in the Department of Creative Design Technologies will work extensively with professional directors, filmmakers, animators and screenwriters as well as actors, sportspeople and composers.

Meanwhile, our Engineering and Design students will work to a syllabus designed in partnership with industry and will have the opportunity to collaborate in our state-of-the-art co-working facilities.

Our Engineering and Design programmes are uniquely designed to take a problem-based learning approach following the CDIO engineering cycle: Conceive – Design – Implement – Operate. This provides a highly practical and engaging experience that encourages interdisciplinary team-working to solve open-ended problems and foster communication skills. These are exactly the skills that will help our students to stand out in a competitive employment arena.
Engineering & Materials

Engineering and materials science are central to our world. They allow us to design and create everything from transportation systems and medical scanners, through to multi-billion pound facilities, like CERN, that probe the fundamentals of the universe.

Studying Engineering at Chichester will give you an understanding of the scientific foundations, practical skills, materials and techniques that will enable you to make a constructive contribution to competitive industries.

Traditional engineering courses often involve large, impersonal lectures but our courses are taught in small, interactive seminar groups in our state-of-the-art facilities. Our unique CDIO (Conceive–Design–Implement–Operate) approach means you will take part in practical workshop learning, lab work, and seminars with demonstrations. This ground-breaking degree is unique as each year centres on a two-semester-long design-build-test challenge. We don’t do lectures!

In your first year of study, you will take part in a team CDIO challenge with other students in your Engineering cohort as well as covering modules on engineering mathematics, mechanics and materials. In Year Two, the CDIO challenge is an interdisciplinary team project working with students from other engineering disciplines. You will also study more advanced topics including manufacturing techniques. In the third year, you will work on an individual project and cover a range of compulsory and optional specialist modules to prepare you for a diverse and interesting career.
**Where this will take you**

Mechanical Engineering & Materials graduates will have core skills that apply to a diverse range of sectors including:

- The aerospace and automotive industries
- Utilities companies
- Power generation and transmission and nuclear industries
- Rail and civil engineering
- Teaching and academic research
- Business
- Technical sales
- Management
- Health and healthcare industry
- Sporting and leisure companies

Our inclusion of industrially-relevant project and lab experiences along with access to business and enterprise units will provide you with the know-how to set up your own business, if you so wish, and enable you to stand-out in the competitive jobs market.

**Degrees**

- BEng Mechanical Engineering & Materials
- MEng Mechanical Engineering & Materials
- BSc (Hons) Creative Science
- BEng Biomedical Materials Engineering
- MEng Biomedical Materials Engineering
- BEng Sports Engineering
- MEng Sports Engineering
- Integrated foundation year (taken with one of the above)

**OUR UNIVERSITY IS RANKED 9TH OUT OF 119 FOR SATISFACTION WITH TEACHING**

The Guardian League Tables 2017
Electronics & Electrical Engineering

Electronics have revolutionised the world we live in, from microprocessors and mobile communications through to power generation and transmission. Modern society is built on the manipulation of electrical energy! This course will give you knowledge of the scientific foundations on which the electronic revolution is built and provide you with the practical skills and techniques that are used by electronic engineers in industry.

As with all of our engineering courses, this programme is taught in small, interactive seminar groups in our cutting-edge Engineering and Digital Technology Park. We don’t do lectures! Our unique CDIO (Conceive–Design–Implement–Operate) approach incorporates practical workshop learning, lab work, and seminars with demonstrations.

Each year of the course is based around a two-semester-long design-build-test challenge. The knowledge and techniques that you will apply to these projects are gained in modules including: electromagnetism; circuit theory; analogue and digital electronics; and computer programming (Year One), and control and power engineering; analogue and digital design; electrical machines and microcontrollers (Year Two). In the third year, you will work on an individual project and cover a range of compulsory and optional specialist modules to prepare you for the world of work including engineering management, automation and robotics, image processing, law, and the ethics expected of a professional engineer.
**Where this will take you**

Engineering graduates are prized by a wide range of companies and employers. You’ll have skills that are transferable to a diverse range of sectors including:

- The electronics industry
- ICT
- The automotive industry
- Manufacturing
- Electrical power
- The financial sector
- Transportation
- Construction
- Utilities

Most large, and many SME, electronics companies have research and development departments in which electronic and electrical engineering graduates work developing next generation technologies.

Our partnerships with engineers, focus on working to industry briefs, and access to business and enterprise modules will also give you the skills you need to stand out in a crowded industry and to start your own business if you so wish.

**Degrees**

- BEng (Hons) Electronics & Electrical Engineering
- MEng (Hons) Electronics & Electrical Engineering
- BSc (Hons) Creative Science
- Integrated foundation year (taken with one of the above)
OUR UNIVERSITY IS IN THE TOP 20 IN THE UK FOR STAFF WHO MAKE THE SUBJECT INTERESTING

National Student Survey 2016
Creative Science

Combining study of the rapidly changing world of digital electronics with manufacturing techniques, mechanics and materials science, Creative Science is a broad and creative degree course providing you with a solid understanding of the application of science to create solutions for tomorrow.

As Creative Science is an applied subject, our course is based around applied workshop learning; seminars with demonstrations; practical and lab work and design-build challenges.

In your first year of study, you will take part in a team CDIO challenge with other students from the Creative Science and Electronics & Electrical Engineering cohorts. Alongside this, you will study engineering mathematics along with electromagnetism, which is the foundation of electronics. You will also study circuit theory, analogue and digital electronics and computer programming.

The second year CDIO challenge is an interdisciplinary one with students from other engineering cohorts. The second year of study introduces topics that are more advanced, including microcontrollers, electronics design, manufacturing and mechanical design as well as mathematical tools.

In the final year, you will work on an individual project and present your work to a technical and non-technical audience. The course contains many specialist modules required to provide you with the breadth, knowledge and skills needed for a career in engineering and science. The final year teaches renewable energy, embedded systems, advanced materials and advanced mechanical design and there are also module options, allowing you to specialise your field of study.
Where this will take you
Creative Science has been developed to address the shortage of trained engineers with suitably diverse technical skills who are able to understand the fundamental science that underpins engineering and technological development.

Engineering and Science graduates are highly employable, finding work in many sectors including:
- The electronics industry
- ICT
- The automotive industry
- Manufacturing
- Software development
- The financial sector
- Transportation
- Construction
- Utilities

Most large, and many SME technology companies have research and development departments, in which science and engineering graduates can work developing next generation technologies.

Degrees
- BSc (Hons) Creative Science
- Integrated Foundation Year (taken with the course above)

We’re proud to be University of the Year for Student Retention in 2014 and 2017
Times and Sunday Times Good University Guide
Product Design

Product designers combine functionality, beauty, desirability, usability and identity to generate effective and intuitive products that make life easier. Good design is an integral part of making a successful product, from the next generation of smartphones to the furniture in an office space.

Our Product Design degrees will provide you with a balance of creative and artistic modules and with materials knowledge and practical skills, allowing you to explore the dynamic world of the product designer.

We offer three distinct programmes. The BA Product Design degree is for those who wish to major in the artistic aspects of Product Design, with an emphasis on form, aesthetics and identity. Our BSc Product Design shares many of the same modules but balances creative topics with mathematics and science. Our BEng Product Design & Innovation is an engineering degree with a product design leaning. The course contains the same science, mathematics, and many of the engineering modules that are found in the BEng Mechanical Engineering and Materials Course.

All of our programmes are uniquely designed to enable you to hit the ground running as a professional product designer. They are delivered using the highly acclaimed problem-based CDIO (Conceive-Design-Implement-Operate) approach to provide a practical and engaging experience of Product Design. You will be taught in small, interactive seminar groups. With interdisciplinary projects in every year of the course, you will be able to put your learning immediately into practice, working with students studying engineering and reproducing the environment encountered in industry.
Where this will take you
As a product designer, you will have skills that are highly relevant to:

- Manufacturing
- Research and development
- In-house design departments
- Design consultancies
- Project management
- Packaging design
- Retail and exhibition design
- Marketing

Our Product Design courses are designed to offer you real-world project experiences and access to business and enterprise units. This will give you the skills you need to stand-out in a competitive industry and the know-how to set up your own practice.

Degrees
- BA (Hons) Product Design
- BSc (Hons) Product Design
- BEng (Hons) Product Design & Innovation
- MEng (Hons) Product Design & Innovation
- Integrated foundation year (taken with one of the above)
Film Production, Animation and Visual Effects

As a student working within a vibrant cultural hub of actors, sportspeople, filmmakers, composers, screenwriters and animators, you will be in the ideal creative environment to undertake practical project work.

Our programmes encompass the development of skills in digital technologies, visual design, and animation, post-production and VFX. Our award-winning Department-led films have enabled students to work alongside some of the UK’s most highly respected filmmakers and crafts people.

You will take part in practical filming and production, study trends in contemporary media culture and develop your theoretical and practical skills in everything from writing the creative brief, through to shooting and editing, while working on real-time projects with our team of professional directors, animators and screenwriters. Modules across our degree programmes include everything from Multi-Camera Live Events and a ‘Script to Screen’ week on location, to Digital Film Operations, Post Production, and Screenplay Structure. In the third year, there are also opportunities to undertake a Creative Portfolio and independent projects.

From 2018, our courses will be based in the University’s Engineering and Digital Technology Park which will offer students the very latest media technologies in an exciting, state-of-the-art environment including a 250 square-metre sound stage, a large green screen stage, media editing and finishing suites (including a wide range of industry software) and brand new teaching facilities.
Where this will take you

Career paths include:
- Commercials and advertising
- Film, production, writing, cinematography, and postproduction
- Television, researchers and journalists
- Games
- Special Effects
- Animation
- Design
- Public Relations
- Marketing and Advertising
- Teaching
- Postgraduate study at international film schools

Degrees
- BA (Hons) Digital Film Production & Screenwriting
- BSc (Hons) Digital Film Technologies
- BSc (Hons) Creative & Digital Media
- BA (Hons) 3D Animation & Visual Effects
“Looking back, I only have fond memories of Chichester. The course is fundamental to gaining experience within the industry, and as such I had the pleasure of working for the BBC. Upon leaving the University, my knowledge was more than enough to set up my own media company, with a priority in corporate and wedding videos. I owe a great deal to the staff of the Media Department for teaching techniques, inspiring ideas and above all believing in me.”

Marc Farrell, graduate.

“Working on a film is something that you cannot learn in the classroom. It is a different experience from anything else I have done and working with industry professionals gives you true insights of what it means to work at the highest level. When we are on-set we learn in a different way and these skills will help me to hit the ground running when I do land my first job out of university.”

Stephanie Ridge, second-year student.
Since the early 20th century, film, television and the media have been an important part of our culture and daily lives. In the digital age, these industries present vibrant and diverse career opportunities.

At Chichester, we offer challenging and absorbing degrees designed to provide skills in preparation for work in media, film, broadcast and the creative industries. As such, we offer a mixture of theory and hands-on practical assessment focusing on media, film, television and sports media, depending on your degree choice.

Students will develop highly marketable skills and learn how to critically analyse the way the media reflects and influences the political, personal, social and cultural landscape. As your course progresses, you will have the opportunity to choose from a range of fascinating and practical modules including Marketing and Advertising, Hollywood, Journalism and Blog Culture, Multi-Camera Live Events and Extreme Media.

Students on our specialist Sports Media course will study the history of media coverage of sport, reflect on the cultural and social significance of sport, explore interdependent relationships between sport and the media, and examine sports communication in the digital landscape. A significant focus is invested in hands-on experience of working in sports media production.

From 2018, these courses will be based at our state-of-the-art Engineering and Digital Technology Park, offering students access to cutting-edge technology including a 250 square-metre sound stage, a large green screen stage, media editing and finishing suites (including a wide range of industry software) and brand new teaching facilities.
Where this will take you

Career paths include:
• Commercials and advertising
• Film, production, writing, cinematography, and postproduction
• Television, researchers and journalists
• Journalism
• Public Relations
• Marketing and Advertising
• Publishing
• Teaching
• Postgraduate study at international film schools

Degrees
• BA (Hons) Media & Communications
• BA (Hons) Film & Television Studies
• BA (Hons) Sports Media
Student view

“There were so many things I loved about the University of Chichester, but mainly the person I became and how happy the place made me. It was a second home for me.”
Abigail Alder, graduate.

“After graduating I got a job as an assistant producer in television before moving on to work for Sky Sports in graphics. I worked on live Premier League football, Rugby Union, US and European golf, tennis, NFL, cricket and much more. I am now the main graphics designer and operator for Chelsea Football Club TV and online. The University of Chichester gave me so much insight into what the industry is like and helped me realize what made me stand out as a candidate. The lecturers were all so enthusiastic, constantly there for advice and always willing to go out of their way for students. I developed a whole range of skills at university that proved important in gaining my first media job.”
Sam Mason, BA (Hons) Sports Media.
Screenwriting and Performance

Our courses will prepare you for a professional screenwriting, creative writing or acting career. You will examine the art, craft and industry of screenwriting and performance, with a particular emphasis on contemporary practice and commercial requirements.

You will be guided by a team of professional and experienced writers and actors, with credits in feature films, TV drama and award-winning short films, as well as novelists, short story writers and poets.

Our programmes focus on developing awareness of industry, form and creative approaches used in generating vibrant and original screenplays, poems and stories. You will explore structure, genre, character and tone through project work and analysis as you shape your style and processes. The course will involve the development of a creative portfolio with knowledge acquired in modules as varied as the Foundations of Story, Hollywood Films, Comedy, Directing Actors, Acting Craft, Writing the Feature Film, Poetry, Script Editing, Post-Production, Marketing and Promotion, and Horror Cinema.

From 2018, our courses will be based in the University’s brand new Engineering and Digital Technology Park in state-of-the-art facilities alongside creatives, engineers, videographers, animators, visual effects specialists, and students studying media, film and television.
Where this will take you

Our Creative Writing and Screenwriting programme can open the door to careers in:

- Television
- Film
- Theatre
- Games
- Publishing
- Writing
- Animation
- Radio
- Advertising
- Screenwriting
- Teaching

Degrees

- BA (Hons) Screenwriting
- BA (Hons) Screenwriting and Creative Writing
- BA (Hons) Screen Acting & Creative Technologies
Student view

“What’s really nice about the course is that you find people that you have something in common with […] After lectures we’ll go to the SU and workshop each other’s poetry and short stories. It’s really fun. It’s like being part of Dead Poets’ Society or something – like this is university, this is what I do here. It’s amazing!”

Ryan Karacochi
Watch Ryan’s video at prospectus.chi.ac.uk
Do you want to work on real productions with well-known actors and industry professionals?

Our students are given the opportunity to produce films alongside Trundle Films, a professional outfit whose film shorts have been shown across cinema and film festivals and won awards all over the globe. Trundle Films is an innovation of a trio of academics from the University, who are creating exciting and award-winning work.

As just one example, our students helped create 15-minute short, Submerged, an homage to traditional Cold War thrillers which was shot entirely on HMS Alliance, an old World War Two submarine. The feature was directed by Programme Coordinator Darren Mapleton and written by Head of Department Michael Holley. The soundtrack was composed by Professor in Film Composition Stephen Baysted, while professional crews during filming were led by Game of Thrones and Doctor Who editor Tim Porter.

Our students have also worked alongside Game of Thrones and Monty Python actors to transform an old gothic chapel into a time-traveller’s laboratory for post-war sci-fi thriller, and course module, The River. In addition, staff and students collaborated on the production of dark drama Brandy and Pep: the tale of two feuding sisters who share a sinister secret. The film was produced by award-winning pop promo creator Tim Pope, who has directed videos for the world’s most influential artists, including Sir Paul McCartney, David Bowie, and Queen.

Trundle Films’ outputs are regularly entered into international film festivals and have been very successful. These include the Great Lakes International Film Festival in Pennsylvania as well as the Motor City Nightmares horror expo in Michigan, Detroit. Submerged was also screened at the renowned Los Angeles Film Festival Awards in late 2015, following its official premier at the Aesthetica Short Film Festival in York. Meanwhile, My Name is Georgina, shot at the University, was honoured at a 2013 short film festival in London.
"MY IMAGINATION REFUSES TO SEE ANY SORT OF SUBMARINE DOING ANYTHING BUT SUCCOTATING ITS CREW."

H. G. WELLS

SUBMERGED

Barren
Brenstoed
Lucinda
Kennard
Writer
Michael Holley
Director
Danier Macleod