Cork Institute of Technology - Programmes Available Under Science Without Borders Call 2

Name Of Programme	Online Link to Programme	Description of Programme	Subject Area
BEng (Honours) in Chemical and Biopharmaceutical Engineering	http://www.cit.ie/course/CR105	Chemical Engineers create and develop processes to make useful products from raw materials, in a cost effective and safe manner. Chemical Engineering is ideally suited to students with ability in mathematics and chemistry, who enjoy problem solving and aspire to be successful. The programme includes lectures, practical and laboratory classes and project sessions. Also visit www.cit.ie/chemeng. The Institution of Chemical Engineers (IChemE) accredits this degree at Masters Level and thus considers it to be on a par with MEng degrees offered by top international institutions.	Engineering and other technological areas
BEng (Honours) in Structural Engineering	http://www.cit.ie/course/CR109	Structural Engineering is the science and art of designing civil engineering facilities so that they can safely resist the forces to which they may be subjected. Structural Engineers aim to design these structures with safety, economy and elegance. The course is taught primarily through lectures, practicals and tutorials. A significant emphasis is placed on project and experimental work with site visits and field trips making up an integral part of the coursework.	Engineering and other technological areas
BEng (Honours) in Biomedical Engineering	http://www.cit.ie/course/CR520	This course has been designed to produce the type of engineering graduates required by the rapidly growing biomedical industry. It concentrates on giving a strong grounding in traditional engineering subjects such as Mathematics, Mechanics, Thermodynamics, Electro Technology and Manufacturing Technology. This is complemented by studies in anatomy, physiology and microbiology in the early years. More specialised subjects such as biomechanics, biomedical materials, and clinical engineering management are blended through the latter years of the course.	Engineering and other technological areas
BSc (Honours) in Quantity Surveying	http://www.cit.ie/course/CR570	Quantity Surveying aims to provide value for money through the efficient cost management of the construction process. The objective of Quantity Surveying is to control cost, limit risk and add value to a project. The course is taught primarily through lectures, practicals and tutorials. A significant emphasis is placed on project and experimental work with site visits and field trips making up an integral part of the coursework.	New technologies for constructive engineering
BEng (Honours) in Electronic Systems Engineering	http://www.cit.ie/course/CR590	This course starts with the basics of electronics, i.e. analogue and digital circuits and computer programming, and progresses upwards to modern electronic systems which can be found in computers, mobile phones, medical devices, cars, etc. Course work involves theory, practice, and project work. The technical subjects are supported by a range of professional development modules which work on the individual's ability to communicate, work in teams and understand business concepts.	Engineering and other technological areas
BSc (Honours) in Analytical Chemistry with Quality Assurance	http://www.cit.ie/course/CR340	This course focuses on quality assurance, which is of vital importance to the pharmaceutical, chemical and allied industries. Graduates are qualified in areas such as Quality Standards, Good Manufacturing Practice, Total Quality Management, and Regulatory Compliance. Graduates are prepared for laboratory careers in the pharmachem industries. They may take up leadership roles in areas such as method design and implementation, process validation, and management of quality systems.	Pharmaceuticals

BSc (Honours) in Instrument Engineering	http://www.cit.ie/course/CR360	Instrument Engineering is the specialisation that is centred on the principles of operation and applications of the diverse range of measurement and control instrumentation used to automate machinery and processes throughout industry. This course provides a unique opportunity to obtain an internationally recognised honours degree qualification with significant career opportunities. The course is presented through a mix of formal lectures and practical sessions.	Engineering and other technological areas
Bachelor of Science (Honours) in Environmental Science and Sustainable Technology	http://www.cit.ie/course/CR365	The aim of this course is to produce graduate scientists for a range of interesting careers within the smart green economy. This programme provides a comprehensive foundation in the physical sciences of physics and chemistry with other modules in mathematics, instrumentation, computer technology and biology. There are modules covering recycling, reduction, reuse, water quality and air quality also, as well as modules in communications skills.	Engineering and other technological areas
BEng (Honours) in Mechanical Engineering	http://www.cit.ie/course/CR108	Mechanical Engineering involves the design, manufacture and operation of products that have motion or have internal moving parts. This ranges from the design and manufacture of high performance engines, machines with atomic level precision to aircraft, wind turbines, major power plants and process equipment to the maintenance of industrial, chemical, pharmaceutical and food processing plants. Design and project work is a major feature of the course.	Engineering and other technological areas
BEng (Honours) in Sustainable Energy	http://www.cit.ie/course/CR510	Sustainable Energy involves the understanding and application of the engineering and technological principles of energy conversion and use. Attention is given to component scale and systems design along with efficient management, control and measurement of energy supply systems. The first two years of the course introduce and develop the fundamental components of an engineering discipline. The third and fourth years extend the specialist nature of the course.	Renewable Energy
BEng (Honours) in Building Energy Systems	http://www.cit.ie/course/CR522	The aim of the programme is to provide students with the tools and skills necessary to calculate, analyse and forecast energy use within the built environment, in spaces such as office, semi-conductor clean rooms or sports stadiums. This requires the student to develop the ability to integrate building physics, climate science, thermal comfort criteria, building services design and energy systems delivery into the design process, all underpinned by the use of sophisticated computer simulation.	Engineering and other technological areas
BSc (Honours) in Architectural Technology	http://www.cit.ie/course/CR560	This is a studio-led course involving the development of working drawings and other construction related work, with a range of lectures and site visits designed to contribute to the student's comprehension and to the development of project work. Students have the opportunity to pursue specific areas of research critical to the built environment and architectural practice. Students identify individual areas of interest in the architectural process and conduct intensive research leading to expertise.	New technologies for constructive engineering
BSc (Honours) in Interior Architecture	http://www.cit.ie/course/CR565	Interior Architecture involves the design of interiors of buildings, their layout, fitting, furnishing and decoration, and the preparation of all technical drawings and written documentation necessary for the carrying out of the work. The core of this course is the design studio where skills in design and representation are integrated with mastery of content from other modules. The emphasis is the development of strong design and analytical skills in a studio-based environment.	New technologies for constructive engineering

BSc (Honours) in Construction Management	http://www.cit.ie/course/CR572	Construction Management deals with the organisation and management of a construction project. The Construction Manager has overall control of the progression of the project and is responsible for ensuring that the required personnel, materials and equipment are available in the correct sequence and at the appropriate time. Significant emphasis is placed on project and experimental work, with site visits and field trips making up an integral part of the coursework.	New technologies for constructive engineering
BEng (Honours) in Electrical Power Systems	http://www.cit.ie/course/CR590	Providing electrical power in a modern economy is about generation, distribution and usage in a safe, economic and sustainable way. Fossil fuel energy now combines with solar, wind and tidal energy to create "embedded" generation which needs a "smart grid" to automatically switch users and suppliers in and out while maintaining the quality of the supply. CIT's Electrical Power Systems course is designed to equip engineers for this environment.	Engineering and other technological areas
BSc (Honours) in Software Development	http://www.cit.ie/course/CR106	This software development course provides graduates with the skills and knowledge required to design and create the software programmes that people use every day. The key to this honours degree lies in its broad range of modules. Elective modules in the final year allow the student an opportunity to specialise in particular application areas of their choice e.g. IT security, graphics, and artificial intelligence.	Information and Communication Technologies (ICTs)
BSc (Honours) in Software Development and Computer Networking	http://www.cit.ie/course/CR116	This is a bi-focal course with equal emphasis on Software Development and Computer Networking. The aim of the programme is to produce software developers with general computing skills but with an emphasis on programming, analysis and design skills necessary for the creation of network/internet based applications. Graduates may also find employment in a wide range of industries as networking specialists.	Information and Communication Technologies (ICTs)
BSc (Honours) in IT Management	http://www.cit.ie/course/CR310	IT Management is concerned with the planning, installing, supporting and managing the IT resources within an organisation. IT resources include all the computer hardware, networking equipment and computer software that an organisation uses to support its operation. This course is designed to provide the graduate with the technical, communication and management skills to operate across a wide range of organisation types.	Information and Communication Technologies (ICTs)
BSc (Honours) in Web Development	http://www.cit.ie/course/CR312	This course provides graduates with the skills and knowledge required to design and create web sites and web applications (the software programmes that people use every day on the Internet). The course has a strong focus on the use of current and emerging web technologies and user experience. Besides the Web based modules, the course has a mix of general software development modules to produce a rounded and competent software developer.	Information and Communication Technologies (ICTs)
Bbus (Honours) Business Information Systems	http://www.cit.ie/course/CR150	Business Information Systems involves a strong mix of business related and technology related topics allowing students to examine from a business perspective the use and management of information technology in a variety of business environments. This includes systems integration; management; marketing; accounting and management accounting; information communication technology strategy; computer applications; enterprise resource planning systems; legal studies; entrepreneurship; international business; project management; and systems analysis and development.	Information and Communication Technologies (ICTs)

BSc (Honours) in Pharmaceutical Biotechnology	http://www.cit.ie/course/CR325	This course provides the student with the core knowledge and practical skills to graduate as a biotechnologist, with particular emphasis on modules pertaining to pharmaceutical biotechnology. Specifically the course will allow you to (a) grow and observe biological cells under different conditions, (b) extract, purify and characterise bio-molecules, (c) produce and analyse a variety of bio-active substances in cells and (d) graduate as a biotechnologist.	Biotechnology
BSc (Honours) in Herbal Science	http://www.cit.ie/course/CR330	The course encompasses numerous topics which stem from the cultivation, harvest, processing, application and effect of using herbs and other associated plant materials in medicinal and other relevant applications. This course provides students with a broad scientific education based on the use of medicinal plant materials. The fundamental concepts of constitutional medicine are taught throughout the course and form the basic building blocks for innovative research.	Health and Biomedical Sciences
BSc (Honours) in Nutrition & Health Science	http://www.cit.ie/course/CR333	This course is designed to meet the need for technically competent managers, analysts and officers in the design, development, production, upgrading of products which are ingested, injected, implanted, inhaled, inserted or topically applied to the bodies of humans or animals for the maintenance, restoration and promotion of their health and well being. Years 1 and 2 include a range of broad scientific modules while years 3 and 4 cover more specialised topics such as Food and Healthcare Chemistry, Toxicology and Microbiology.	Health and Biomedical Sciences
BA (Honours) Multimedia	http://www.cit.ie/course/CR%20112	Multimedia combines the creativity of art and design with the skills and knowledge of computer technologies and programming to create interactive digital media products such as online and mobile applications, screen based or environmentally interactive designs. The course is designed to foster a range of interests and abilities including art, design, music, technology and computing. Areas of specialist study include e-Learning, games development, interaction design, interactive programming, 3D/ animation, video production and audio technology.	Creative Industry
BA (Honours) Visual Communications	http://www.cit.ie/course/CR%20600	The course aims to produce graduates who will be knowledgeable, capable and highly motivated in the practice and theory of Visual Communications. It aims to equip graduates with the knowledge, skills and competencies required to effectively function as a designer at an independent and professional level. The course pays particular attention to the development of each student's ability to respond to visual design problems in an individual, inventive and creative manner. It incorporates areas such as design principles and practice, creative image making, typography, creative technology, print technology, illustration, photography, video, contextual and business studies.	Creative Industry
BA (Honours) Contemporary Applied Art (Ceramics, Glass, Textiles)	http://www.cit.ie/course/CR210	The new and exciting Contemporary Applied Art Degree course explores contemporary ideas, use of materials and offers students the opportunity to creatively develop and make objects. The course combines studio projects and practical workshop based sessions, where idea development and making are integrated. Students have a base studio, where individual and group tutorials, crits and presentations take place. The contextual academic modules combine lectures, seminars, workshops, and tutorials, encouraging a high level of debate and interaction. The programme is staffed by practicing professionals, and visiting lecturers who regularly contribute specialist expertise	Creative Industry

BA (Honours) Fine Art	http://www.cit.ie/course/CR%20220	The Fine Art programme provides a studio based education in Fine Art, with emphasis on personal creative development. Fine Art describes any art form developed primarily for aesthetics or concept rather than utility. Students are introduced to the skills and philosophies of the practicing artist, and the course prepares them for active careers in the visual arts or for further study to Masters degree level.	Creative Industry