

The Institute of Physics officially Accredits and Recognises most physics courses in the UK & Ireland – see [http://www.iop.org/education/higher\\_education/](http://www.iop.org/education/higher_education/) for details. For physics course listings throughout the UK and Ireland see [http://www.iop.org/education/student/physics\\_on\\_course/page\\_41676.html](http://www.iop.org/education/student/physics_on_course/page_41676.html)

CAOCODE	Qualification Title	Main Features	First Year Subjects
<b>Belfast ■ QUB ■ <a href="http://www.qub.ac.uk/mp">www.qub.ac.uk/mp</a> or <a href="http://www.qub.ie/mp">www.qub.ie/mp</a></b>			
N/A	BSc and MSci (3/4 years) Physics Physics with Medical Applications Physics with Astrophysics Physics with Applied Mathematics Physics with Extended Studies in Europe Theoretical Physics BSc only: (3 years) Physics and Computer Science	Core Physics with Mathematics and Computing. Core Physics with Medical Applications. Core Physics plus Galactic Astronomy, Astrophysical Techniques, Stellar Physics, The Early Universe. Core Physics with Applied Mathematics. Core Physics with European language and 1 year Physics study abroad; language qualification required. Selected modules of Physics/Applied Mathematics. Wide choice of Physics and Computing modules at later stages.	Physics, Mathematics and Computing.  Core Physics and Computing.
<b>Cork ■ CIT ■ <a href="http://www.cit.ie">www.cit.ie</a></b>			
CR001	Applied Physics & Instrumentation BSc Degree (3 years), BSc Honours Degree (4 years)	Ordinary degree provides specialised education in measurement/control that helps develop design capabilities in instrumentation. Honours degree programme option for suitably qualified graduates.	Applied Physics, Instrumentation, IT, Electronics, Maths, Chemistry.
CR360	BSc Honours – Instrument Engineering (4 years)	This physics based programme aims to produce instrument engineers for process and related industries, their service providers and system integrators.	Instrumentation, Physics, IT, Electronics, Maths and Chemistry.
CR365	BSc Honours – Environmental Science & Sustainable Technology	This physics/science based programme aims to produce personnel for a range of careers within environmental science and sustainable technology.	Environmental Science, Sustainable Technology, Physics, Chemistry, Maths, IT, Instrumentation.
<b>Cork ■ UCC ■ <a href="http://www.ucc.ie">www.ucc.ie</a></b>			
CK408	BSc Single Honours (4 years) Physics  Astrophysics Chemical Physics Education in Physical Sciences	Mainstream Physics degree for those wishing to be professional physicists in industry (e.g. telecommunications, finance, IT, etc.) and research. Includes theoretical and experimental aspects. Core physics topics with astrophysics modules. Programme in Physics and Physical Chemistry with topics related to molecular sciences, spectroscopy, photophysics and theoretical modelling. Experience of second level teaching to help students determine if they would like to become physical sciences teachers.	Physics, Mathematics and Applied Mathematics with options from Chemistry and Computer Science. Note: the CK408 degree can also be entered from the CK407 Mathematical Sciences programme.
CK407	BSc Joint Honours in Mathematical Sciences Physics and Mathematics Physics and Applied Mathematics	Core physics combined with high level abstract mathematics recommended for theoretical physicists. Core physics combined with advanced mathematical and computation methods recommended for theoretical physicists.	Physics, Mathematics, Applied Mathematics and Statistics. Note: the CK407 degree can also be entered from the CK408 Physics and Astrophysics programme.
<b>Dublin ■ DCU ■ <a href="http://www.dcu.ie">www.dcu.ie</a></b>			
DC171	BSc Applied Physics (4 years)	Fundamental physics with specialisation in Lasers/Optoelectronics, IT/Computing, nanomaterials. Emphasis on laboratory work and projects. Options: Nine month Industrial Placement or research laboratory placement in third year	Physics, Mathematics, IT, Astronomy, Chemistry.
DC167	BSc Physics with Astronomy (4 years)	Strong background in Physics with Mathematics and IT for astronomy applications. Astronomy content throughout all 4 years. Individual and group project work (some in conjunction with local and foreign observatories) throughout and includes a foreign observatory field trip.	Physics, Mathematics, IT, Astronomy, Chemistry.
DC173	BSc Physics with Biomedical Sciences (4 years)	Physics with the chemical and biological principles and techniques needed to pursue a career in biomedical health and medical physics, incorporating a placement in industry, research group or a hospital physics department.	Physics, Mathematics, IT, Physiology, Chemistry.
DC203	BSc Science Education (4 years)	Training of Science teachers qualified to Leaving Certificate Level into work from Physics, Chemistry and Mathematics. Experience of secondary level teaching is provided mainly in years 2 and 3.	Physics, Chemistry, Mathematics, Biology, & Education.
DC165	Science International Entry BSc Applied Physics (4 years)	Choice from range of Science degrees at end of first year, including Applied Physics. International placement in year 3.	Physics, Chemistry, Mathematics and Biology.
DC201	Common Science Entry BSc Applied Physics (4 years) BSc Physics with Astronomy (4 years)	Introduction to Physics, Chemistry, Biology and Mathematics. Choice from range of science degrees at end of first year including Applied Physics and Physics with Astronomy.	Physics, Chemistry, Biology, Mathematics.
DC166	BSc Environmental Science & Health (4 years)	Merging the traditional science disciplines with the discipline of health, approached from an environmental perspective. Physics course includes Medical Physics and Meteorology.	Physics, Chemistry, Biology, Mathematics.
<b>Dublin ■ DIT ■ <a href="http://www.physics.dit.ie/">http://www.physics.dit.ie/</a></b>			
DT 260	BSc (Ordinary) Industrial and Environmental Physics (3 years)	Technical Training in Applied Physics, with particular focus on physics applied to the industrial workplace and environmental physics. Option to proceed to honours degree programme for suitably qualified graduates.	Physics, Chemistry, Mathematics, Biology, IT, Professional Development.
DT 222	BSc (Honours) Physics Technology (4 years)	These courses provide graduates with scientific and analytical skills as well as problem solving ability. They will provide the student with a soundly based and coherent body of scientific and technical knowledge that is relevant to the technological needs of industry and society.	Physics, Chemistry, Mathematics, IT, Professional Development.
DT 229	BSc (Honours) Clinical Measurement (4 years)	Integrated training in the area of clinical measurement, medical measurement systems and instrumentation. Year 3 is hospital based.	Physics, Chemistry, Biology, Mathematics, Statistics, Computers, Anatomy, Physiology, Physics, Biology, Chemistry, Mathematics, Computational Studies and Professional Development.
DT 235	BSc (Honours) Physics with Medical Physics and Bioengineering (4 years)	A programme in Physics with particular emphasis on applications of Physics and Engineering to medical devices, medical physics and bioengineering. Industrial placement in year 3.	Physics, Chemistry, Biology, Mathematics, Computational Studies, Professional Development.
DT 227	BSc (Honours) Science with Nanotechnology (4 years)	Course consists of core physics and chemistry subjects, with an increasing focus on nanoscience and technology in later years. Industrial placement in year 3.	Physics, Chemistry, Biology, Mathematics, Computational Studies, Professional Development.
<b>Dublin ■ TCD ■ <a href="http://www.tcd.ie">www.tcd.ie</a></b>			
TR035	BA Theoretical Physics (4 years)	Includes theoretical and experimental aspects, a range of courses in pure and applied mathematics and an introduction to computing leading in later years to Classical Fields, Quantum Mechanics, Statistical Physics, Condensed Matter Physics, Particle Physics, General Relativity and other topics in theoretical physics. A liking for mathematics is essential.	Mathematics, Physics.
TR076	BA Nanoscience, Physics and Chemistry of Advanced Materials (4 years)	Application of physics and chemistry to the development of nanodevices, nanostructures and advanced materials required by modern technology. In sophister years this course places particular emphasis on nanomaterials and nanostructures.	Physics, Chemistry and Mathematics.
TR071	BA Physics (4 years) BA Physics and Astrophysics (4 years)	Balanced experimental and theoretical training in core Physics. Specialist courses in years 3 and 4 include Optoelectronics, Superconductivity, Magnetism, Semiconductor devices, Condensed Matter Physics, Quantum Mechanics and High Energy Physics. Students can opt to specialise in year 3 in Astrophysics for their final two years.	Physics, Mathematics and one from Chemistry, Geology/Geography, Biology.
<b>Dublin ■ UCD ■ <a href="http://www.ucd.ie/science/">http://www.ucd.ie/science/</a></b>			
DN200MPS	BSc Single Honours (4 years) BSc Joint Honours (4 years) BSc General Science (3 years)	Fully modular degree structure, with 12 modules taken per year. Strong emphasis on training in key laboratory skills. Courses include Medical Physics, High Energy Particle Physics, Lasers, Biophysics, Condensed Matter Physics, Quantum Mechanics and Relativity.	UCD Science provides a flexibility of choice in first-year subjects to include physics, mathematics and applied and computational mathematics.
DN200MPS	BSc Theoretical Physics (4 years)	Major areas of theoretical physics: Mechanics, Relativity Theory, Quantum Mechanics, Computational Physics, Atomic Physics, Nuclear Physics, Condensed Matter Physics and Astrophysics.	At a total of 10 science modules must be taken in stage 1, allowing students to tailor their study plans to focus on physics or to sample more widely to explore their interests. Students may take up to 2 of their 12 first year modules from the entire UCD first year selection.
DN200MPS	BSc Physics with Astronomy and Space Science (4 years)	This physics degree programme places an emphasis on the applications of physics in astrophysics and space science. Students will gain an understanding of how ground-based and space-based technologies are used to explore the Universe and how modern science can be used to understand it. Students gain hands-on experience in astronomical techniques and, participate in an international mission design workshop or astronomical observation field trip.	
<b>Galway ■ GMIT ■ <a href="http://www.gmit.ie">www.gmit.ie</a></b>			
GA 773	BSc (Ordinary) Physics and Instrumentation. (Higher Cert if required after 2 years). BSc Ordinary (3 years). Option of add on BSc Honours (4 years)	Common science entry for first year, students may then choose Physics and Instrumentation course for second year and subsequent years (ladder structure). Course has strong emphasis on practical and project work to complement theory.	Five from Physics, Instrumentation, Chemistry, Computer Applications, Mathematics, Biology.
GA783	BSc (Honours) Physics and Instrumentation (4 years)	This course develops design and problem solving abilities in Physics, Instrument & Control Systems, Applied Optics and Optoelectronics, Semiconductors, Spectroscopic Instrumentation, Computer Interfacing Digital Signal and Image Processing. These are achieved through an interesting and comprehensive programme of experimental and project work run in conjunction with the theoretical tuition.	Physics, Instrumentation, Chemistry, Computer Applications, Mathematics.
<b>Galway ■ NUIG ■ <a href="http://www.nuigalway.ie">www.nuigalway.ie</a></b>			
GY301	Undenominated Science Entry leading to: BSc Single Honours (4 years) Physics and Applied Physics  BSc Joint Honours Applied Mathematics and Physics (4 years)	This degree, with undenominated entry, covers all core Physics and Applied Physics. See entry for GY315 for details.  This degree has an almost equal emphasis on Physics and on Mathematical Physics throughout all 4 years. The most important topics of Physics are covered. This course is well suited to students who lean towards the theoretical aspects of Physics. Students enter GY301 and transfer to this programme at the end of their second year.	Four from: Physics, Biology, Chemistry, Computer Science, Earth & Ocean Science, Mathematics, Mathematical Physics.
GY315	BSc Physics and Applied Physics (4 years) Physics and Applied Physics	The Physics and Applied Physics course provides comprehensive coverage of Physics, including Mechanics, Heat, Sound, Electricity & Magnetism, Optics, Atomic and Nuclear Physics, Relativity, Quantum Mechanics as well as specialised courses in Optoelectronics, Atmospheric Physics, Nanotechnology, Computational Physics, Signal Analysis and Image Processing. Optional units in Astrophysics or Medical Physics can also be taken.	Physics, plus three from the following: Astronomy, Mathematics, Mathematical Physics, Chemistry or Computer Science.
GY316	BSc Physics with Medical Physics (4 years)	This programme combines essential core Physics modules with Medical Physics, Chemistry, Mathematical Science, Biology and Anatomy. Graduates of this course will be qualified to continue to professional graduate training in medical physics or to pursue a career in research, industry, teaching and other many areas.	Physics, Mathematics, Chemistry, Biology, Introduction to Medical Physics.
GY317	BSc Physics with Astrophysics (4 years)	This programme has a strong emphasis on Computing and Mathematics, in which the full core Physics programme is complemented by parallel courses which cover the latest advances in Astrophysics. There are substantial Astrophysics units in each year, with hands-on practicals in observing, data analysis, and simulation, including a 3rd year field trip to a large observatory in Italy, and the use of a well-equipped radio and optical observatory on campus.	Astronomy, Physics, Mathematics, Mathematical Physics, Computing.
GY319	BSc Mathematical Science (4 years)	This programme covers all aspects of Mathematics and its applications, giving students a solid foundation in the Mathematical Sciences. Physics may be optionally taken in first and second year. Students specialise in later years in: Mathematics, Applied Mathematics, Theoretical Physics, Financial Mathematics, Computer Science, or Statistics with Bioinformatics.	Applied Mathematics, Computing, Mathematics, Applied Mathematics, Probability and Statistics and one from Physics, Biology, Chemistry or Earth and Ocean Sciences.
<b>Limerick ■ UL ■ <a href="http://www.ul.ie">www.ul.ie</a></b>			
LM065	BSc Applied Physics (4 years)	The programme provides a strong foundation in the fundamental principles of physics, and builds on this to provide a thorough understanding of matter and its manipulation on the atomic scale with the purpose of creating, characterising, controlling and understanding nanodevices/nanomaterials. The course provides the training to work in the high-technology sector, in particular the semiconductor industry, but also prepares graduates for research careers in medical physics, nanotechnology and energy.	Physics, Mathematics, Chemistry, Electronics.
LM087	BSc Energy (4 years)	Students study physics, chemistry, electronics and electrical science, together with introductory courses on energy, sustainable development, and earth science to provide a thorough grounding in energy. In the later years students can study solar, nuclear, wind, ocean and hydroelectric energy, transportation, and advanced methods of energy control and storage. Students can specialise in either Energy Control, Energy Markets, Energy Management or Energy Science, preparing them for careers in these areas.	Energy, Physics, Chemistry, Biology, Electronics, Mathematics.
LM096	BSc (Education) Physical Science (4 years)	The core physics, chemistry and mathematics subjects run concurrently with a teacher education programme. Graduates are qualified to teach Leaving Certificate Physics, Leaving Certificate Chemistry and Junior Certificate Science in all Irish post-primary schools.	Physics, Chemistry, Mathematics, Education.
<b>Maynooth ■ NUIM ■ <a href="http://www.nuim.ie">www.nuim.ie</a></b>			
MH201	BSc Single Honours (4 years) Experimental Physics  Theoretical Physics  BSc Joint Honours (4 years) Experimental Physics with Theoretical Physics Experimental Physics or Theoretical Physics with one of Mathematics, Biology, Chemistry, Computer Science	Programme for those interested in specialising in mainstream Experimental Physics. Topics include Quantum Mechanics, Relativity, Planetary Science, Solid-State Devices, Radiation & Medical Physics, Particle Physics. Programme for those interested in specialising in mainstream Theoretical physics. Topics include Electromagnetism, Quantum mechanics, Relativity, Chaos, Non-Linear Dynamics & Quantum Information.  Programme for those who want to combine Experimental and Theoretical Physics at an honours level. Programme for those who want to combine a core Physics programme with another subject at an honours level.	Experimental Physics and/or Mathematical Physics, Mathematics, and one of two of Biology, Chemistry, Computer Science (4 subject total).
MH204	BSc Single Honours (4 years) Physics with Astrophysics	Specialist Astrophysics topics are studied in addition to core Physics courses. Topics include stellar structure and evolution, neutron stars, black holes, high-energy astrophysics, cosmology & astronomical instrumentation. Includes field trips to optical and radio astronomical observatories and ESA.	
MH206	BSc Honours (3 years) Theoretical Physics & Mathematics	Accelerated degree in Mathematics and Theoretical Physics.	
MH212	BSc (Honours) Science Education (4 years)	This degree is for students who wish to become teachers of science in second-level schools. Students study education disciplines at honours level and also gain practical teaching experience. The use of new technologies as a support for teaching and learning is a major feature of this course. Experimental Physics (see MH201) and another science subject can be taken to honours degree level so students will be qualified to teach their chosen science subjects or to follow a career as a physicist.	Experimental Physics, Biology, Chemistry and Mathematics
<b>Waterford ■ WIT ■ <a href="http://www.wit.ie">www.wit.ie</a></b>			
WD180	BSc (Honours) in Physics for Modern Technology	This 4-year degree programme will provide students with the knowledge, skills and expertise to work in a range of industries in the high technology sector. Topics include: Alternative Energy; Photonics, Lasers and Optical Systems; Materials Engineering; Semiconductor Device Technology; Instrumentation and Measurement Systems; Programming and Networking. Year 3 includes a 6-month work placement in industry.	Physics, Mathematics, Programming Fundamentals, Materials Engineering, Data Acquisition and Science Support Studies.