University of the West of Scotland Undergraduate Programme Specification

Session: 2023/24

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Status: Published

Named Award Title:	BSc (Hons) Ph	nysics with Education Single			
Award Title for Each Award:	BSc (Hons) Physics with Education BSc Physics with Education Studies Dip HE Science Cert HE Science				
Date of Validation:	April 2017				
Details of Cohorts Applies to:	Those entering	Levels 7, 8 or 9 in September 2017			
Awarding Institution/Body:	University of the West of Scotland				
Teaching Institution:	University of the West of Scotland				
Language of Instruction & Examinatio	English				
Award Accredited By:		General Teaching Council for Scotland (GTCS)			
Maximum Period of Registration:		6 Years Full-time, 8 Years Part-time			
Mode of Study:		Full Time			
Campus:		Ayr Paisley			
School:		School of Computing, Engineering and Physical Sciences			
Programme Board		Physical Sciences			
Programme Leader:		John F. Smith			

Admission Criteria

Candidates must be able to satisfy the general admission requirements of the University of the West of Scotland as specified in Chapter 2 of the University Regulatory Framework together with the following programme requirements:

SQA National Qualifications

BBBC at Higher including Mathematics and Physics OR

BBBC at Higher including Mathematics at B grade and National 5 Physics at B grade CCD at Advanced Higher including Mathematics and Physics for direct entry to Year 2

Before progressing to Year 3, students must meet the following requirements:

English at SCQF Level 6 (eg Higher)

Mathematics at SCQF Level 5 (eg National 5, Standard Grade (Grade 1 or 2), Intermediate 2)

or GCE

CC at A Level including Mathematics and Physics OR

BCC at A Level including Mathematics and Physics for direct entry to Year 2

Before progressing to Year 3, students must meet the following requirements:

GCSE English Language and English Literature at C or above

GCSE Mathematics at B or above

or SQA National Qualifications/Edexcel Foundation

SQA HNC (Grade A)/BTEC Level 4 HNC in Physics, Applied Sciences or a relevant discipline

Before progressing to Year 3, students must meet the following requirements:

Acceptable alternatives to the English and Mathematics qualifications listed above are given in the Memorandum on Entry Requirements to Programmes of Initial Teacher Education in Scotland (General Teaching Council for Scotland (GTCS), 2013).

Other Required Qualifications/Experience

Year 1: Irish Leaving Certificate: BBBC including Mathematics and Physics or International Baccalaureate (IB) Diploma: 24 points (4, 4 at Higher level)

Year 2: SQA HNC (Grade A)/BTEC Level 4 HNC: Physics, Applied Sciences or a relevant discipline, BTEC Extended Diploma: DDM, Scottish Baccalaureate in Science: Advanced entry to Year 2 will be dependent on subjects studied and grade of award or International Baccalaureate (IB) Diploma: 28 point (4, 4 at Higher level)

Year 3: SQA HND (Grade B)/BTEC Level 5 HND/Foundation Degree: Physics, Applied Sciences or a relevant discipline

Applicants may also be considered with other academic, vocational or professional qualifications deemed to be equivalent.

Before progressing to Year 3, students must successfully undertake an interview conducted by School of Education staff.

Students who are offered the opportunity to progress to Year 3 of this programme must apply for and obtain membership of the Protection of Vulnerable Groups Scheme before enrolment.

Further desirable skills pre-application

Experience of working with young people and up-to-date knowledge and understanding of secondary education in Scotland will aid progression to Year 3 of this programme.

General Overview

The BSc (Hons) Physics with Education programme is designed to fulfil the requirements of the QAA subject benchmark statement for Physics (2017), the Institute of Physics Core of Physics (2011), the Guidelines for Initial Teacher Education Programmes in Scotland (GTCS, 2013), the benchmark statement for Standard for Provisional Registration (GTCS, 2012) and the QAA subject benchmark statement for Education Studies (2007).

The overall aim of the programme is to develop individuals with a range of transferable graduate skills who will acquire Honours-level knowledge and skills in Physics alongside attaining the Standard for Provisional Registration, and thus be eligible to apply for provisional registration with GTCS and entry to the Teacher Induction Scheme as a secondary school teacher of Physics with Science.

The programme teaches the fundamentals of Physics as a core science and practical classes will enhance students' understanding of the principles and techniques of experimental physics. In the first two years, the programme includes intensive study of the core principles of traditional Physics: translational, rotational and vector mechanics; heat; electricity and magnetism; waves mechanics; and optics and electronics. In addition, relevant modules in Mathematics are core. The third and fourth years involve study of Physics topics that dominated understanding of science phenomena in the 20th century: atomic, nuclear, particle and quantum physics and special relativity, solid-state physics, electromagnetism and

thermodynamics. The depth of knowledge across a broad range of Physics topics supports the teaching of senior phase courses up to Advanced Higher level.

In year one, students are able to choose an option module in Biology or Chemistry, which, as they progress through the programme, will support their delivery of General Science in the Broad General Education phase of secondary education.

The study of Education is introduced in year three with a focus on key educational issues, cross-cutting curricular themes, contexts for learning and professional values. Knowledge and understanding of curriculum, pedagogy and assessment of Physics and General Science, and the skills and abilities to implement effective teaching and learning, are developed in year four, through campus teaching and school experience placements.

In accordance with the relevant GTCS and QAA benchmarks, graduates will have demonstrated the attributes, knowledge and skills encompassed by the following core areas:

Professional Values and Personal Commitment

The core values defined as Social Justice, Integrity, Trust and Respect, and Personal Commitment, which are integral to, and demonstrated through, all professional relationships and practices. Professional Knowledge and Understanding

The knowledge and understanding of Physics and General Science within the secondary curriculum, including contexts for learning to fulfil their responsibilities in literacy, numeracy, health and wellbeing and interdisciplinary learning; the principal features of the education system and their own professional responsibilities within the learning communities in which they will teach; relevant educational principles and pedagogical theories; and the importance of research in informing professional practice. Professional Skills and Abilities

The ability to design, deliver and assess effective, appropriate and stimulating programmes of work in Physics and General Science within the secondary curriculum that are suitable for children at different stages of secondary education; and to use reading, research and feedback from a range of sources to inform effective self-evaluation and maintain a record of professional learning and development culminating in an Initial Professional Development Action Plan.

The programme will encourage the student to engage in lifelong learning, study and enquiry and to appreciate the value of education to society. It will also assist the student to develop the skills required for both autonomous practice and team-working.

Opportunities for further study

The Standard for Provisional Registration is part of a suite of professional standards published by GTCS (2012). Individuals obtaining Provisional Registration aim to progress to Full Registration and are then expected to continue to develop their expertise through 'appropriate and sustained career long professional learning' (GTCS, 2012). The suite of professional standards may be used to guide this learning and includes, for example, the Standards for Leadership and Management. Non-award-bearing courses have always formed an important part of professional development and update for teachers, but many opportunities exist at Masters level and above in subjects and areas relevant to schools and the wider world of education.

Honours graduates may also choose to pursue further study of Physics through MSc or PhD programmes at this or other universities.

Teaching, learning and assessment

Lectures, tutorials, workshops, laboratory classes and use of the Moodle VLE, employing a range of learning and teaching methodologies including group work, investigations, problem-based learning, concept visualisation (eg using drawing and collage), walking, student presentations, online tutor/student-led discussions, and resources such as subject-specific equipment, interactive whiteboards, laptops and the outdoors, will be used, as appropriate, to develop student learning. In order to enable students from the BSc (Hons) Physics with Education, BSc (Hons) Chemistry with Education, PGDE (Secondary) and PGDE (Primary) programmes to benefit from working together, the School & Professional Studies (L9) module will be delivered through a blended approach using the Moodle VLE and some face-to-face lectures, tutorials and workshops. Within the Moodle VLE, students will make use of e-learning methods such as remotely accessing set and extension readings and other course materials, and online and asynchronous communication with peers, and supported by tutors, to address problem-based learning tasks. Students are required to undertake significant independent learning in each module.

Student handbooks and other material made available to students will give more detailed information on the particular learning and teaching methodologies, and combinations of these methodologies, to be used for timetabled student sessions. This will clarify for students both their expectations for timetabled

sessions, and their expectations for the overall balance of learning and teaching methodologies to be used during the programme.

On-going formative assessment across the programme will provide feedback to students on their developing thinking on subject knowledge and skills, educational issues and professional abilities. Summative assessment of academic study will take the form of essays, project reports, laboratory reports, oral presentations, problem sheets and examinations. Assessment of school experience is outlined under Work Based Learning/Placement Details.

Graduate Attributes, Employability & Personal Development Planning

The programme is designed to develop students' range of skills and attributes that are transferable to other areas of study and professional employment, including: demonstrating high levels of technological expertise geared towards problem-solving and project progress; knowing how to access and apply relevant research findings; practising in a range of professional contexts, which include a degree of unpredictability; communicating effectively, both orally and in writing, with a range of audiences; engaging in professional dialogue with peers and senior colleagues; constructing and sustaining reasoned and coherent arguments about professional practices; undertaking critical analysis, evaluation and synthesis of ideas, concepts, information and issues; justifying personal opinions by referring to appropriate evidence from a range of sources; reflecting on and acting to improve the effectiveness of their own practice; adopting an enquiring approach to professional practice, demonstrating some originality and creativity in finding solutions to professional issues; exercising autonomy and initiative in professional activities; working with others and, at times, taking a leading role; and dealing with complex ethical and professional issues in accordance with current professional and/or ethical codes of practice.

Personal Development Planning (PDP) is central to the programme, which aims to develop in every student the professional qualities and capabilities of a reflective practitioner. From Level 7 to 9, exercises used for PDP/transferable skills development will be drawn from core module provision, to ensure that there is a strong link between PDP and the curriculum. In all aspects of PDP, the emphasis will be on students taking personal responsibility for their PDP portfolio, with support from staff as appropriate to each level.

At Level 10, while the PDP process is formally embedded within the Secondary School Experience module and is linked to target setting and evaluation on placement, students will also be encouraged to reflect on personal and professional learning in academic work and its impact on developing practice and progress towards achievement of the Standard for Provisional Registration. The PDP process will culminate in the production of an Initial Professional Development Action Plan.

Upon graduation and provisional registration with the GTCS, graduates are eligible for entry to the Teacher Induction Scheme. This scheme is administered by the GTCS, in partnership with the Scottish Learning Directorate, and provides a guaranteed one-year probationary post to every eligible student. We have defined a set of Graduate Attributes that are the skills, personal qualities and understanding to be developed through your university experience that will prepare for life and work in the 21st century (https://www.uws.ac.uk/current-students/your-graduate-attributes/). The Graduate Attributes relevant to this module are listed below.

Academic: critical thinker; analytical; inquiring; knowledgeable; digitally literate; problem solver; autonomous; incisive; innovative

Personal: effective communicator; influential; motivated

Professional: collaborative; research-minded; enterprising; ambitious; driven

Work Based Learning/Placement Details

In compliance with the requirements of the GTCS, a total of eighteen weeks, or ninety days, is devoted to school experience, occurring in each school term, with a block of at least four weeks taking place towards the end of the programme, in secondary school environments.

At the end of Level 9 and early in Level 10, students will undertake two-week observation placements in order to establish links between theory and practice. Student handbooks and other very detailed materials made available to students will set out the requirements and expectations of the three

substantial periods of school experience, including the maintenance of the teaching file. During each placement, students will monitor their progress through target-setting and evaluation in a personal development plan.

Following formative assessment of the first substantial period of school experience, the two subsequent placements will be assessed summatively by the partner school and the visiting University tutor. In addition to written feedback, students will receive Satisfactory or Unsatisfactory grades for each of the eight benchmark areas of the Standard for Provisional Registration. Assessment of the module is on a pass/fail basis, dependent upon satisfactory or unsatisfactory performance in school. The overall assessment of pass or fail is achieved by totalling the grades awarded by the partner school and those awarded by the University tutor.

To assure placement partners that students are appropriately prepared to undertake periods of school experience, and in accordance with module and programme handbooks, any student whose attendance has fallen below the 75% minimum requirement for Secondary STEM Subject Studies and Secondary School Experience during any of the three blocks of campus study preceding the periods of school experience (and who is therefore deemed to be unprepared for a period of school experience) will normally be required to undertake a period of further preparation (on campus) when other students are on placement. UWS Regulation 5.7 also applies to periods of school experience, and it should be noted that any student whose attendance has fallen below the 75% minimum requirement may be deemed not to have met the professional requirements of the programme as accredited by the GTCS and, therefore, may not be eligible for assessment on that placement. In either case, the required school experience placement would normally be completed in the August/September diet following that academic year of study.

Engagement

In line with the <u>Academic Engagement Procedure</u>, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the Library and on the relevant learning platform, and complete assessments and submit these on time.

Equality and Diversity

Further information on the institutional approach to Equality, Diversity and Inclusion can be accessed at the following link: https://www.uws.ac.uk/about-uws/uws-commitments/equality-diversity-inclusion/

Programme structures and requirements, SCQF level, term, module name and code, credits and awards (Chapter 1, Regulatory Framework)

A. Learning Outcomes (Maximum of 5 per heading)

Outcomes should incorporate those applicable in the relevant QAA Benchmark statements

	Knowledge and Understanding						
A1	Demonstrate a broad general knowledge of the physics topics covered (Mechanics, Electromagnetism, Waves, Heat, Gravitation, and core Maths)						
A2	To apply knowledge and understanding to solve relevant numerical and non-numerical problems						
A3	Record simple experimental procedures in individual work						
	Practice - Applied Knowledge and Understanding						
B1	Use the skills of observation, recording of measurements and problem solving in both theoretical and practical situations						

B2	Use skills to plan and perform small scientific projects in the laboratory					
В3	Use some of the basic and routine professional skills, techniques and practices					
	Communication, ICT and Numeracy Skills					
C1	Use a range of forms of communication, both spoken and written					
C2	Use graphical and numerical skills in combination					
С3	Be able to summarise and present scientific individual work effort for critical peer evaluation					
G	Generic Cognitive Skills - Problem Solving, Analysis, Evaluation					
D1	Use a range of approaches to address problems in a routine context within physics					
D2	Critical analysis of obtained experimental data					
D3	Present and evaluate arguments, information and ideas in physics					
D4	Use a range of numerical and graphical skills in combination					
	Autonomy, Accountability and Working With Others					
E1	Exercise initiative and independence in practical situations					
E2	Work in partnership with others in practical classes, taking account of each other's roles and responsibilities					
Е3	Work with others in support of current professional practise under tutorial guidance					

Core Modules

SCQF Module Level Code	Module	Module Name	Cons dit	Term			Eastmates
	Code		Credit	1	2	3	Footnotes
7	PHYS07006	Introductory Physics A	20	>			
7	MATH07003	Mathematics of Space & Change	20	>			
7	PHYS07005	Skills for Physics	20	✓	/		
7	PHYS07007	Introductory Physics B	20		/		
7	MATH07009	Mathematics of Space & Change 2	20		~		
7	APPD07001	ASPIRE	20	✓	\		

^{*} Indicates that module descriptor is not published.

Footnotes
Optional Modules

SCQF Level	Module	Module Name	Credit	Cradit	Crodit	Cradit	7	Tern	n	Footnotes
Level	Code	Module Name		1	2	3	rootnotes			

^{*} Indicates that module descriptor is not published.

Footnotes

Criteria for Progression and Award

Progression to SCQF Level 8 is available to students who fulfil the university progression requirements.

A student may exit with an award of Cert HE Science, with a minimum of 120 credit points.

B. Learning Outcomes (Maximum of 5 per heading)

Outcomes should incorporate those applicable in the relevant QAA Benchmark statements

	Knowledge and Understanding				
A1	Demonstrate a broad knowledge of physics at the appropriate level, with detailed knowledge in some areas				
A2	Demonstrate understanding of a limited range of core theories, principles and concepts				
Practice - Applied Knowledge and Understanding					
B1	Carry out routine investigations in a lab situation				
B2	Adapt routine practices within accepted standards				
	Communication, ICT and Numeracy Skills				
C1	Convey complex information on a topic to an audience				
C2	Use a range of applications to obtain, process and interpret data				
G	eneric Cognitive Skills - Problem Solving, Analysis, Evaluation				
D1	Understanding core issues of depicted physics problems				
D2	Solving of smaller scale theoretical and hand-on laboratory work problems				
	Autonomy, Accountability and Working With Others				
E 1	Work in close partnership with peers on problems				

Core Modules

SCQF	Module	Module Name	C 114	Term			T
Level	Code	Module Name	Credit	1	2	3	Footnotes

8	PHYS08002	Optics & Electronics	20	/		
8	PHYS08007	Classical Mechanics and Special Relativity	20	/		
8	PHYS08006	Mathematics for Physicists	20	/		
8	PHYS08003	Oscillations, Waves & Fields	20		<	
8	PHYS08004	Properties of Matter	20		/	
8	PHYS08008	Mathematics for Physicists 2	20			

^{*} Indicates that module descriptor is not published.

Footnotes

Optional Modules

SCQF Level	Module	Module Name	Credit	Term			Essentes
Level	Code	Module Maine		1	2	3	Footnotes

^{*} Indicates that module descriptor is not published.

Footnotes

Criteria for Progression and Award

Progression to SCQF Level 9 is available to students who fulfil the university progression requirements and the GTCS requirements for entry to programmes of initial teacher education, ie SCQF Level 6 English and SCQF Level 5 Mathematics. Progression is also dependent on a successful interview with School of Education staff.

A student failing to meet the GTCS entry requirements or being unsuccessful at interview may transfer to the BSc (Hons) Physics degree.

A student may exit with an award of Dip HE Science, with a minimum of 240 credit points.

C. Learning Outcomes (Maximum of 5 per heading)

Outcomes should incorporate those applicable in the relevant QAA Benchmark statements

	Knowledge and Understanding							
A1	Demonstrate a broad and integrated knowledge and understanding of the main areas of physics (Atomic, Nuclear, Particle, Solid State, Electromagnetism) and current educational issues							
A2	Display a critical understanding of principal theories, principles, concepts and terminologies of modern day physics knowledge and education, including curriculum design, contexts for learning and cross-curricular links							
A3	Show a knowledge of specialisms informed by forefront developments in physics							

A4	Demonstrate knowledge of current educational issues and effective approaches to teaching and learning informed by forefront developments
A5	Demonstrate knowledge of how to access and apply relevant findings from educational research
	Practice - Applied Knowledge and Understanding
B1	Practise routine methods of enquiry in a lab setting, including topics with a degree of unpredictability
B2	Use information retrieval system present at the university for further reading and understanding of modern day physics concepts
В3	Discuss outcomes in detail with peers and supervisors
B4	Consider how to use skills, practices and materials which are specialised or advanced in a variety of educational settings, environments and circumstances
В5	Consider how to practise in a range of professional contexts, which include a degree of unpredictability
	Communication, ICT and Numeracy Skills
C1	Communicate effectively, using a variety of media including digital technologies, and engage in academic and professional dialogue with peers and university staff
C2	Communicate and report effectively, both orally and in writing, including interpreting and evaluating numerical data
С3	Construct coherent arguments about educational matters and professional practices
C4	Be able to make a formal presentation on a topic as a member of a group
C5	Be able to lead own project
G	eneric Cognitive Skills - Problem Solving, Analysis, Evaluation
D1	Undertake critical analysis; evaluate information and synthesise ideas
D2	Benchmark own findings with standard results as depicted in modern day physics
D3	Critically evaluate sources of uncertainties and limits of modern day physics understanding
	Autonomy, Accountability and Working With Others
E1	Exercise autonomy and initiative in practical classes and intermediate problem solving exercises in physics and at a professional level in educational contexts
E2	Work with others in a group, taking account of own and others' roles and responsibilities, to produce a presentation of intermediate level
Е3	Develop awareness of own and others' roles and responsibilities in educational contexts
E4	Work under guidance with specialist practitioners
ore Modu	

SCQF Level	Module	Module Name	Credit	Term		l	Eastmates
	Code	Module Name	Credit	1	2	3	Footnotes
9	PHYS09003	Electromagnetism	20	>			
9	PHYS09008	Quantum Mechanics	20	<			
9	PHYS09011	Atoms & Nuclei	20		/		
9	PHYS09007	Thermodynamics & Statistical Physics	20		✓		
9	EDUC09048	School & Professional Studies (L9)	40	✓	✓		

^{*} Indicates that module descriptor is not published.

Footnotes

Optional Modules

SCQF Level	Module	Module Name	Credit	Term	Esstuates		
Level	Code	Module Ivalile	Credit	1	2	3	Footnotes

^{*} Indicates that module descriptor is not published.

Footnotes

Criteria for Progression and Award

Progression to SCQF Level 10 is available to students who fulfil the university progression requirements.

A student may exit with a BSc Physics with Education Studies, with a minimum of 360 credit points. The Progression and Awards Board will award distinction to candidates for undergraduate awards other than Honours degrees where a mean mark of 70% or above is achieved by candidates at their first attempt.

D. Learning Outcomes (Maximum of 5 per heading)

Outcomes should incorporate those applicable in the relevant QAA Benchmark statements

Knowledge and Understanding							
A1	Demonstrate integrated knowledge and critical understanding of a broad range of facts, concepts, principles and theories relating to advanced topics in experimental and theoretical physics and to secondary education						
A2	Demonstrate detailed knowledge and understanding of a subject area within the secondary curriculum, current educational issues and effective approaches to teaching and learning, including the ways in which they are developed using established techniques of professional enquiry						
A3 Demonstrate knowledge of how to access and apply relevant findings from educresearch							
Practice - Applied Knowledge and Understanding							

B1	Use a range of skills and practices associated with advanced topics in experimental and theoretical physics					
B2	Design, deliver and assess effective, appropriate and stimulating programmes of work, in a subject area within the secondary curriculum, which are suitable for children at different stages of secondary education, using the results of assessment to evaluate and improve teaching					
В3	Use skills, practices and materials which are specialised, advanced or at the forefront of classroom practice in a variety of settings, environments and circumstances, which includegree of unpredictability and specialism, and maintain a safe, caring and purposeful lead environment within these contexts					
B4	Execute a defined project of professional enquiry related to teaching and learning in secondary school of challenging concepts in physics					
	Communication, ICT and Numeracy Skills					
C1	Communicate effectively, using a variety of media including digital technologies, to promote and develop positive relationships, and to stimulate pupils and achieve the objectives of lessons					
C2	Communicate effectively and engage in professional dialogue with peers, university staff and school colleagues					
С3	Communicate and report effectively, both orally and in writing					
C4	C4 Construct and sustain reasoned and coherent arguments about educational matters and professional practices					
G	eneric Cognitive Skills - Problem Solving, Analysis, Evaluation					
D1	Undertake critical analysis, evaluation and synthesis of complex ideas, concepts, information and issues in physics-related and educational contexts					
D2	Justify a personal stance on physics-related and educational issues by referring to appropriate evidence from a range of sources					
D3	Reflect on and act to improve the effectiveness of their own practice and contribute to the processes of curriculum development, school development planning and meeting the educational needs of school communities					
D4	Adopt an enquiring approach to professional practice, demonstrating some originality and creativity in finding solutions to professional issues					
D5	Develop record of personal professional learning and development into an Initial Professional Development Action Plan					
	Autonomy, Accountability and Working With Others					
E1	Exercise autonomy and initiative in academic and professional activities including managing time and prioritising workloads					
E2	Work effectively under guidance in a peer relationship with qualified practitioners and other agencies and individuals					
Е3	Work effectively with others and, at times, take a leading role in bringing about change, development and new thinking relating to an aspect of physics or secondary education					
E4	Deal with complex ethical and professional issues in accordance with current professional and/or ethical codes of practice and in accordance with the needs of schools and wider communities					
E3	agencies and individuals Work effectively with others and, at times, take a leading role in bringing about change, development and new thinking relating to an aspect of physics or secondary education Deal with complex ethical and professional issues in accordance with current professional and/or ethical codes of practice and in accordance with the needs of schools and wider					

E5	Demonstrate achievement of all aspects of the Standard for Provisional Registration

Core Modules

SCQF	Module Code	Madula Nama	Credit	Term			E44
Level		Module Name		1	2	3	Footnotes
10	PHYS10001	Nuclear & Particle Physics	20	/			
10	PHYS10009	Solid State Physics	20		/		
10	EDUC10050	Secondary STEM Subject Studies	40	<	<		
10	EDUC10049	Secondary School Experience	40	<	<		

^{*} Indicates that module descriptor is not published.

Footnotes

Optional Modules

SCQF Level	Module	Module Name	Credit Term	Term			Footnotes
Level	Code	Woulde Name		3			
10	EDUC10051	STEM Work Based Learning	40	/	√		

^{*} Indicates that module descriptor is not published.

Footnotes

Students who do not pass Secondary School Experience on the second attempt may undertake STEM Work Based Learning, which offers an alternative form of assessment of school experience but will not enable provisional registration with the GTCS.

Criteria for Award

Honours degrees are classified in accordance with university regulations.

Students who complete a minimum of 480 credit points, including Secondary School Experience, will exit with BSc (Hons) Physics with Education, enabling provisional registration with the GTCS.

Students who complete a minimum of 480 credit points, including STEM Work Based Learning, will exit with BSc (Hons) Physics with Education Studies, which will not enable provisional registration with the GTCS.

The BSc (Hons) Physics with Education programme is an example of a professional programme where a Progression and Awards Board has the power to terminate the programme progress of a student whose continuation on placement is judged to be unacceptably damaging to the interests of placement partners, ie schools and their pupils, during school experience. Student handbooks will provide further details. In such cases, students may exit with a BSc Physics.

Regulations of Assessment

Candidates will be bound by the general assessment regulations of the University as specified in the University Regulatory Framework.

An overview of the assessment details is provided in the Student Handbook and the assessment criteria for each module is provided in the module descriptor which forms part of the module pack issued to students. For further details on assessment please refer to Chapter 3 of the Regulatory Framework. To qualify for an award of the University, students must complete all the programme requirements and must meet the credit minima detailed in Chapter 1 of the Regulatory Framework.

Combined Studies

There may be instances where a student has been unsuccessful in meeting the award criteria for the named award and for other more generic named awards existing within the School. Provided that they have met the credit requirements in line with the SCQF credit minima (please see Regulation 1.21), they will be eligible for an exit award of CertHE / DipHE or BA / BSc in Combined Studies. For students studying BA, BAcc, or BD awards the award will be BA Combined Studies. For students studying BEng or BSc awards, the award will be BSc Combined Studies.

Changes

Changes made to the programme since it was last published:

May 2018

MATH07003 Mathematics of Space and Change moved to Trimester 1.

MATH07002 Sequences & Patterns replaced with MATH07009 Mathematics of Space and Change 2 (to be taught in Trimester 2).

PHYS08006 Maths for Physicists moved to Trimester 1.

MATH08001 Maths for Design replaced with PHYS08008 Maths for Physicists 2 (to be taught in Trimester 2).

April 2019

Graduate attributes added.

July 2021

BSc Physics with Educational Studies changed to Physics with Education Studies, throughout (3 instances).

July 2022

The core module APPD07001 ASPIRE has been added in place of the recommended optional module PHYS07008 Introductory Astronomy at L7. The core module PHYS07005 has been converted to a long, thin module with 20 credits over terms 1 and 2.

Version Number: 1.09