Postgraduate Certificate in Secondary Education

Exemptions

Programme Overview

Programme Aims

Programme Intended Learning Outcomes (ILOs)

Subject-Specific Skills and Knowledge

Cognitive and Intellectual Skills

Teachers' Standards

Part One: Teaching

Part Two: Professional Conduct

Programme content

Work experience and placement opportunities

Additional Costs Table Graduate Attributes

Modifications

Appendix 1: Programme Structure Diagram

Appendix 2: Map of Intended Learning Outcomes

Appendix 3: Map of Summative Assessment Tasks by Module

Appendix 4: Module Descriptors

Awarding institution	Bath Spa University
Teaching institution	Bath Spa University
School	School of Education
Main campus	Sion Hill
Other sites of delivery	Newton Park and partnership schools and settings
Other Schools involved in delivery	N/A

Name of award(s)	Postgraduate Certificate in Secondary Education with QTS: * subjects available are:
	Art and Design
	Biology
	Business Studies
	Chemistry
	Computing
	Design and Technology
	Drama
	English
	Geography
	History
	Mathematics
	Modern Languages
	Music
	Physical Education
	Physics
	Religious Education
Qualification (final award)	Postgraduate Certificate
Intermediate awards available	Professional Graduate Certificate in Secondary Education*
	Postgraduate Certificate in Secondary Education Practice*
	Graduate Certificate in Secondary Education Practice*
	*subject specialism available
Routes available	Single
Professional Placement Year	No
Duration of award	1 year
Modes of delivery offered	School based low residency
Regulatory Scheme[1]	Initial Teacher Training Framework

Professional, Statutory and Regulatory Body accreditation	DfE - Qualified Teacher Status (QTS) The Teacher Regulation Agency (TRA)
Date of most recent PSRB approval (month and year)	July 2020
Renewal of PSRB approval due (month and year)	Reviewed as advised by government
Course code	W1X1 (Art and Design)
	CX11 (Biology)
	336P (Business Studies)
	F2X1 (Chemistry)
	IX99 (Computing)
	W9X1 (Design and Technology)
	2N22 (Drama)
	Q3X1 (English)
	345L (Geography)
	37S8 (History)
	G1X1 (Mathematics)
	R9X1 (Modern Languages)
	W3X1 (Music)
	X9C6 (Physical Education)
	F3X2 (Physics)
	V6X1 (Religious Education)

Route code (SITS)	PGCSAR (Art) PGCSBI (Biology)
	PGCBS (Business)
	PGCSCH (Chemistry)
	PGCSCO (Computing)
	PGCSDR (Drama)
	PGCSDT (Design and Technology)
	PGCSEN (English)
	PCGSFL (Modern Languages)
	PGCSGY (Geography)
	PGCSHY (History)
	PGCSMA (Maths)
	PGCSMU (Music)
	PGCSPE (Physical Education)
	PGCSPH (Physics)
	PGCSRE (Religious Education)
Relevant QAA Subject Benchmark Statements (including date of publication)	Initial Teacher Training (ITT): Guidance and supporting advice (DfE, 2021)
	Initial Teacher Education Inspection framework and handbook (Ofsted, 2020)
	Teachers' Standards (DfE, 2021)
	Subject Benchmark Statements, Education
	Studies, QAA (2019)
Date of most recent approval	June 2021
Date specification last updated	June 2021

Exemptions

The following exemptions are in place:

Programme/Pathway	Regulations/Framework	Brief description of variance	Approving body and date

<u>Please note</u>: Throughout this document the acronyms ITE (Initial Teacher Education) and ITT (Initial Teacher Training) are used interchangeably. The Department for Education (DfE) and Ofsted refer to ITT in public documentation. Bath Spa refers to ITE when referring to its PGCE courses.

[1] This should also be read in conjunction with the University's Qualifications Framework

Programme Overview

Bath Spa University has a long and successful history in initial teacher education that started at Newton Park in 1946. Our long tradition of working closely with schools and settings across the region, based on a common goal of training the best teachers, has led to the development of the Bath Spa University (BSU) Initial Teacher Education (ITE) Partnership. Our belief that 'all children deserve the very best teachers' was important to this Partnership in those early days, and is still central to our practice today. We believe that education plays a key role in promoting social justice and reducing social inequalities, and that well qualified and highly skilled teachers make a difference to the lives and futures of the learners they teach. Our Bath Spa University Equality Policy provides details of how equality is at the heart of our provision. All aspects of our provision meet the requirements of the Equality Act 2010.

Our four key principles of *collaboration, critical thinking, creativity, and care* are fundamental to our social justice commitment and define our professional and academic initial teacher education programmes. They form the foundation of our practice and partnership and are interwoven through all aspects of the ITE Partnership Curriculum. They are partly what make the Bath Spa University Partnership a unique and special place to train and they undoubtedly form part of our trainees' identity, that is, the 'Bath Spa Teacher' (BST).

We believe that children and young people are entitled to the highest quality learning experiences that will ensure good progress and positive outcomes in their learning and wellbeing. This demands that those teaching them are of the highest quality. To achieve this, we have developed a collaborative curriculum across school and university that endeavours to support our BSTs in becoming highly competent and confident teachers. The programme is designed to empower BSTs to embrace the professional qualities and attributes that are necessary for a successful outcome. From the start of their training, BSTs will be expected to have a positive impact on the learning and progress of the learners they teach.

In partnership with schools and settings the programme is designed to provide BSTs with challenging and highly effective training and support that will guide their progress throughout the PGCE programme, and into their early careers as teachers. They will learn first-hand from experienced and expert colleagues both in university and in schools/settings. The ITE curriculum and the accurate assessment we make of BSTs progress and attainment is designed to enable BSTs to secure employment within our Partnership schools and beyond.

In partnership with schools, our programme is designed to enable BSTs to become creative practitioners, critical thinkers, collaborative collea gues and professional teachers who care for and nurture the learners they teach. They will have the opportunity to become the very best teachers that **all** children and young people deserve.

Programme Aims

- To provide opportunities for you to research, question, debate and reflect on the roles and responsibilities of being a professional secondary teacher
- To offer you appropriate school and setting training environments, with suitable training mentors and experts, to support your development and progress
- To offer you opportunity to engage in subject and curriculum knowledge experiences that will result in your conceptual and practical understanding of the Secondary agephase of education
- To support you in developing your knowledge and understanding of how to create inspiring, motivating and challenging learning environments that impact positively on children's learning, safety and well-being
- To provide opportunities to develop and reflect on the necessary qualities and attributes for successful and appropriate relationships with children, school and setting colleagues, families and communities
- To provide opportunities for ongoing professional development.

Programme Intended Learning Outcomes (ILOs)

Subject-Specific Skills and Knowledge

You will demonstrate:

A1: a practical understanding of the teaching profession that enables critical reflection and evaluation of your own practice, or that of others, informed by evidence within the Secondary school

A2: a systematic understanding of current issues and developments in Secondary teaching, which is informed by a critical awareness of research and your own experiences within the classroom

A3: a systematic understanding of theories associated with Secondary education that leads to sound judgements being made in their application, through practice and reflection

A4: A practical understanding of teaching within a Secondary Subject area, informed by experience of Secondary School settings

Cognitive and Intellectual Skills

You will demonstrate:

B1: systematic and creative resolution of complex issues, when planning and implementing tasks at a professional level in the Secondary school

B2: autonomy and self-direction in continuing to advance your knowledge and understanding of new skills in the Secondary school

B3: the ability to synthesise ideas and information and communicate your conclusions about the Secondary teaching profession to specialist and non-specialist audiences

Teachers' Standards

By the end of the course you will demonstrate:

Part One: Teaching

TS1 Set high expectations, which inspire, motivate and challenge pupils

TS2 Promote good progress and outcomes by pupils

TS3 Demonstrate good subject and curriculum knowledge

TS4 Plan and teach well structured lessons

TS5 Adapt teaching to respond to the strengths and needs of all pupils

TS6 Make accurate and productive use of assessment

TS7 Manage behaviour effectively to ensure a good and safe learning environment

TS8 Fulfil wider professional responsibilities

Part Two: Professional Conduct

P1 Teachers uphold public trust in the profession and maintain high standards of ethics and behaviour within and outside school

P2 Teachers must have proper and professional regard to the ethos, policies and practices of the school in which they teach, and maintain high standards in their own attendance and punctuality.

P3 Teachers must have an understanding of, and always act within, the statutory frameworks, which set out their professional duties and responsibilities

Teachers Standards (2021)

Intermediate awards

Professional Graduate Certificate in Secondary Education (PrGCE) (in exceptional circumstances, some candidates will be awarded a Level 6 qualification carrying 60 credits, of which up to 45 can be at Level 7)

Programme content

This programme comprises the following modules

Key:

Core = C

Required = R

Required* = R*

Optional = O

Not available for this status = N/A

If a particular status is greyed out, it is not offered for this programme.

Subject offered as single and/or joint programme

PG	CE Second	dary		
Le vel	Code	Title	Cre dits	Sta tus
7	PGS70 03-15	Module 1: Establishing Positive Classroom Environments as a subject-specialist teacher of (secondary subject)	15	С
7	PGS70 04-15	Module 2: How Pupils Learn: Supporting the retrieval of knowledge in your chosen specialist secondary subject area	15	С
7	PGS70 05-15	Module 3: Adaptive Teaching: Adapting resources to meet the needs of learners in your chosen specialist secondary subject area	15	С
7	PGS70 06-15	Module 4: Inspiring Learning: Using powerful analogies, illustrations, demonstrations and alternative learning spaces in your chosen specialist subject area	15	С

Not available for this status = N/A

If a particular status is greyed out, it is not offered for this programme.

Subject offered with pathways

PGCE	Secondary																		
Level	Code	Title	Credits	ts Status															
7	PGS6000-00	QTS - Secondary	0	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
7	PGS6014-00	Subject Knowledge: Art and Design	0	R															
7	PGS6010-00	Subject Knowledge: Business Studies	0		R														
7	PGS6011-00	Subject Knowledge: Computing	0			R													
7	PGS6004-00	Subject Knowledge: Design and Technology	0				R												
7	PGS6003-00	Subject Knowledge: Drama	0					R											
7	PGS6015-00	Subject Knowledge: English	0						R										
7	PGS6002-00	Subject Knowledge: Geography	0							R									
7	PGS6012-00	Subject Knowledge: History	0								R								
7	PGS6001-00	Subject Knowledge: Mathematics	0									R							
7	PGS6005-00	Subject Knowledge: Modern Languages	0										R						
7	PGS6016-00	Subject Knowledge: Music	0											R					
7	PGS6006-00	Subject Knowledge: Physical Education	0												R				
7	PGS6013-00	Subject Knowledge: Religious Education	0													R			
7	PGS6007-00	Subject Knowledge: Science (Biology)	0														R		
7	PGS6008-00	Subject Knowledge: Science (Chemistry)	0															R	
7	PGS6009-00	Subject Knowledge: Science (Physics)	0																R

Assessment methods

A range of summative assessment tasks will be used to test the Intended Learning Outcomes in each module. These are indicated in the attached assessment map which shows which tasks are used in which modules.

Students will be supported in their development towards summative assessment by appropriate formative exercises.

<u>Please note</u>: if you choose an optional module from outside this programme, you may be required to undertake a summative assessment task that does not appear in the assessment grid here in order to pass that module.

Work experience and placement opportunities

In line with compliance requirements for Initial Teacher Training (DfE ITT criteria and supporting advice) and supporting advice, and for the QTS elements of training, you will be situated in at least two complimentary school/setting placements for a minimum of 120 days, during the programme. As part of the DfE Quality Requirements, there is also a further 20 days focused on aspects of the curriculum, termed Intensive Training and Practise (ITP).

Additional Costs Table

Module Code and Title	Type of Cost	Cost to the student
PGS6000-00 QTS - Secondary	Trips and Visits: Travel to and from school placements	variable

PGS6000-00 QTS -	Regulatory fees: DBS	approximately £30-
Secondary		£40

Graduate Attributes

1 Will be employable: equipped with the skills necessary to flourish in the global workplace, able to work in and lead teams 2 Will be able to understand and manage complexity, diversity and change 3 Will be creative: able to innovate and to solve problems by working across disciplines as professional or artistic practitioners 4 Will be digitally literate: able to innovate and to solve problems. By engaging successfully with the interface of creativity and technology 5 Will be digitally literate: able to innoverseas 6 Will be internationally networked: either by studying alongside students from overseas 6 Will be in the global work at the interface of studying alongside students from overseas 6 Will be in the global work at the interface of studying alongside students from overseas 6 Will be in the global work at the interface of studying alongside students from overseas 6 Will be creative: and considered and the skills in critical selsights the opportunity to explore different teaching and learning approaches and strategies, adopting creative and innovative solutions to problems. By engaging successfully with the ITE curriculum they will have the opportunity to make a positive impact on the learning and progress of children and young people. 7 Will be digitally literate: able to work at the interface of creativity and teachnology 8 Will be internationally networked: either by studying abroad for part of their programme, or studying alongside students from overseas 8 Will be internationally networked: either by studying alongside students from overseas		Bath Spa Graduates	In the PGCE with QTS programme, we enable this is the following ways:
understand and manage complexity, diversity and change BSTs will have the opportunity to develop their skills in critical analysis. This foundation is designed to help BSTs manage complexity, diversity and change within their professional roles and practices. By the end of the programme the BSTs will have the opportunity to draw on a range of reflective tools and frameworks to support these outcomes. BSTs will have the opportunity to explore different teaching and learning approaches and strategies, adopting creative and innovative solutions to problems. By engaging successfully with the ITE curriculum they will have the opportunity to make a positive impact on the learning and progress of children and young people. The programme gives BSTs the opportunity to progress their digital literacy skills through using technology creatively and effectively, both in the classroom and as part of their academic studies. The programme draws from internationally renowned research and best practice to support BSTs in preparing to meet the Teachers' Standards for England (DfE, 2021) whilst also maintaining global awareness of educational practice.	1	Will be employable: equipped with the skills necessary to flourish in the global workplace, able to	The programme is designed to be coherent and carefully sequenced in order to provide BSTs with the opportunity to demonstrate the necessary knowledge, skills and understanding for future learning and employment. By engaging successfully with the ITE curriculum, BSTs will have the opportunity to develop
to innovate and to solve problems by working across disciplines as professional or artistic practitioners 4 Will be digitally literate: able to work at the interface of creativity and technology 5 Will be internationally networked: either by studying abroad for part of their programme, or studying alongside students from overseas learning approaches and strategies, adopting creative and innovative solutions to problems. By engaging successfully with the ITE curriculum they will have the opportunity to make a positive impact on the learning and progress of children and young people. The programme gives BSTs the opportunity to progress their digital literacy skills through using technology creatively and effectively, both in the classroom and as part of their academic studies. The programme draws from internationally renowned research and best practice to support BSTs in preparing to meet the Teachers' Standards for England (DfE, 2021) whilst also maintaining global awareness of educational practice.	2	understand and manage complexity,	BSTs will have the opportunity to develop their skills in critical analysis. This foundation is designed to help BSTs manage complexity, diversity and change within their professional roles and practices. By the end of the programme the BSTs will have the opportunity to draw on a
literate: able to work at the interface of creativity and technology 5 Will be internationally networked: either by studying abroad for part of their programme, or studying alongside students from overseas skills through using technology creatively and effectively, both in the classroom and as part of their academic studies. The programme draws from internationally renowned research and best practice to support BSTs in preparing to meet the Teachers' Standards for England (DfE, 2021) whilst also maintaining global awareness of educational practice.	3	to innovate and to solve problems by working across disciplines as professional or artistic	learning approaches and strategies, adopting creative and innovative solutions to problems. By engaging successfully with the ITE curriculum they will have the opportunity to make a positive impact on the learning and progress of
networked: either by studying abroad for part of their programme, or studying alongside students from overseas practice to support BSTs in preparing to meet the Teachers' Standards for England (DfE, 2021) whilst also maintaining global awareness of educational practice.	4	literate: able to work at the interface of creativity and	skills through using technology creatively and effectively, both in the classroom
6	5	networked: either by studying abroad for part of their programme, or studying alongside students from	practice to support BSTs in preparing to meet the Teachers' Standards for England (DfE, 2021) whilst also maintaining global awareness of educational
	6		

	Will be creative thinkers, doers and makers	During the programme, BSTs will have the opportunity to develop a range of creative and innovative pedagogical approaches to teaching and learning
7	Will be critical thinkers: able to express their ideas in written and oral form, and possessing information literacy	Through lectures, seminars, tutorials, and formative feedback BSTs are supported in developing their skills in reading and writing with criticality. They are encouraged to demonstrate their skills as critical thinkers in reflective reviews, assignments and evaluations (written and verbal) of their teaching.
8	Will be ethically aware: prepared for citizenship in a local, national and global context	Through the carefully structured ITE curriculum, BSTs are given the opportunity to understand and apply the ethical dimension that underpins their professional code of practice. The exploration of theory, research and practice will provide students with the opportunity to build an awareness of the challenges that face schools and settings when considering barriers to learning and the knowledge and skills needed to overcome them.

Modifications

Module-level modifications

Code	Title	Nature of modification	Date(s) of approval and approving bodies	Date modification comes into effect
PGS6000-00	QTS module (Secondary PGCE)	Change to contact hours	SQMC November 2023	2024/25
see programme content table	All subject and curriculum knowledge modules	Change to contact hours	SQMC November 2023	2024/25

Programme-level modifications

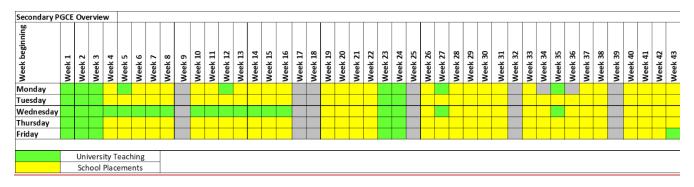
Nature of modification	Date(s) of approval and approving bodies	Date modification comes into effect
PGS7001-30 The Curriculum in (secondary subject) My Emerging Identity removed	Curriculum Approval Panel, December 2023	2024/25
PGS7002-30 Adaptive Teaching - Inclusion in your secondary subject removed	Curriculum Approval Panel, December 2023	2024/25

PGS7003-15 Establishing Positive Classroom Environments added	Curriculum Approval Panel, December 2023	2024/25
PGS7004-15 How Pupils Learn added	Curriculum Approval Panel, December 2023	2024/25
PGS7005-15 Adaptive Teaching added	Curriculum Approval Panel, December 2023	2024/25
PGS7006-15 Inspiring Learning added	Curriculum Approval Panel, December 2023	2024/25
Clarification and changes to Programme Overview, Graduate Attributes 5 and Programme Structure diagram	Curriculum Approval Panel, December 2023	2024/25

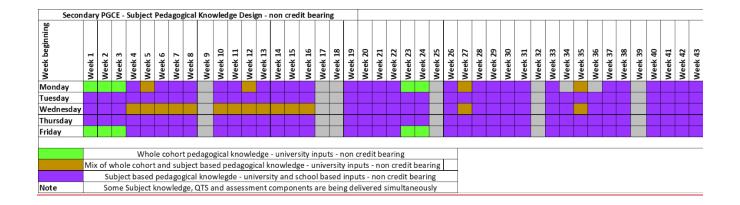
Attached as appendices:

- 1. Programme structure diagram
- 2. Map of module outcomes to level/programme outcomes
- 3. Assessment map
- 4. Module descriptors

Appendix 1: Programme Structure Diagram



			Sec	ond	ary l	PGC	E Ov	ervi	ew -	Asse	ssm	ents	Sub	mis	sion																												
Week beginning	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20	Week 21	Week 22	Week 23	Week 24	Week 25	Week 26	Week 27	Week 28	Week 29	Week 30	Week 31	Week 32	Week 33	Week 34	Week 35	Week 36	Week 37	Week 38	Week 39	Week 40	Week 41	Week 42	Week 43
Monday	1	1	1	1	. 1	. 1	. 2	2 2		2	2	2	2	3	3	3			3	3	3	3	3	3	3	3	3	3	4	4	4		4		4								
Tuesday	1	1	1	1	1	. 1	2	2 2		2	2	2	2	3	3	3			3	3	3	3	3	3	3	3	3	3	4	4	4		4	4	4	4							
Wednesday	1	1	1	1	. 1	. 1	2	2 2		2	2	2	2	3	3	3			3	3	3	3	3	3	3	3	3	3	4	4	4		4	4	4	4							
Thursday	1	1	1	1	. 1	. 1	2	2 2		2	2	2	2	3	3	3			3	3	3	3	3	3	3	3	3	3	4	4	4		4	4	4	4							
Friday	1	1	1	1	_ 1	15	2	2 2	1R	2	2	2	25	3	3	2R			3	3	3	3	3	3	3	3	3	3S	4	4	3R		4	4	4	45			4R				
														•																													
				1st	Assi	gnn	nent	- lin	ked t	o IT	Pwe	ek 1																															
				2nd	Ass	ignr	nent	: - lir	ked	to IT	Pwe	ek 2	2																														
				3rd	Ass	ignn	nent	- lin	ked 1	to IT	Pwe	ek 3																															
				4th	Ass	gnn	nent	- lin	ked t	to IT	P we	ek 4																															



Week beginning	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12 (5)	Week 13	14	Week 15	Week 16	17	Week 18	Week 19	Week 20	Week 21	Week 22	Week 23		Week 25		Week 27	Week 28	Week 29	Week 30	Week 31	Week 32	Week 33	Week 34	Week 35	Week 36	Week 37	Week 38	Week 39	Week 40	Week 41	Week 42	Week 43
Monday																																											
Tuesday																																											
Wednesday																																											
Thursday																																											
Friday																																											
				QTS	- M	eetii	ng th	ne Te	ach	ers' S	Stan	dard	s - c	over	ed a	cros	s wh	ole	cou	rse v	with	judg	mer	nt m	ade	at e	nd o	f co	urse														
Note	S	ome	cor	וסמר	nent	ts of	Sec	onda	arv P	GCE	is de	live	ed i	n co	niun	ctio	n wit	th ea	ach o	othe	r. E.	g. O	TS a	nd s	ubie	ct p	edag	ocio	al kr	now	ledg	e											

Secondar	y PGCE
Leve	17
Semester 1	Semester 2
Core Mo	odules
PGS7003-15 Establishing Positive Classroom Environments PGS7004-15 How Pupils Learn	PGS7005-15 Adaptive Teaching PGS7006-15 Inspiring Learning
PGP6000-00 QTS Module (Primary and Early Years)	

PGS6003-00 Subject Knowledge: Drama

Required Modules PGS6014-00 Subject Knowledge: Art and Design PGS6010-00 Subject Knowledge: Business Studies PGS6011-00 Subject Knowledge: Computing PGS6004-00 Subject Knowledge: Design and Technology

PGS6015-00 Subject Knowledge: English

PGS6002-00 Subject Knowledge: Geography

PGS6012-00 Subject Knowledge: History

PGS6001-00 Subject Knowledge: Mathematics

PGS6005-00 Subject Knowledge: Modern Languages

PGS6016-00 Subject Knowledge: Music

PGS6006-00 Subject Knowledge: Physical Education

PGS6013-00 Subject Knowledge: Religious Education

PGS6007-00 Subject Knowledge: Science (Biology)

PGS6008-00 Subject Knowledge: Science (Chemistry)

PGS6009-00 Subject Knowledge: Science (Physics)

Rule Notes: QTS and Required subject specialisms span the duration of the programme.

Appendix 2: Map of Intended Learning Outcomes

Lev	Module	Module Title	Status	Inte	ndec	l Lea	rnin	g Ou	tcome	es	
el	Code		(C,R, R*,O	spe Skil	oject- cific Is an	d		and	llectu		Teachers Standards
				A1	A2	А3	A4	B1	B2	ВЗ	
7	PGS7003- 15	Establishing Positive Classroom Environments	С	X	Х	Х	Х	Х	Х	X	
7	PGS7004- 15	How Pupils Learn	С	X	Х	Х	X	X	Х	Х	
7	PGS7005- 15	Adaptive Teaching	С	X	Х	Х	Х	X	Х	Х	
7	PGS7006- 15	Inspiring Learning	С	X	Х	Х	X	X	Х	Х	
N/A	PGS6000- 00	QTS Module	R								TS1,2,3,4,5,6,7,8 and Part 2
N/A	See programme content table	Subject and Curriculum Knowledge in all secondary subjects	R	X			X	X			

[4] C = Core; R = Required; $R^* = Required^*$; O = Optional

Appendix 3: Map of Summative Assessment Tasks by Module

L	Module Code	Module Title	Status (C,						Asse	ssment m	nethod				
e v			R,R*,O)[5]	Cou	ırsew	vork				Practical			Writ	tten Examin	ation
el									Practica I Project			Set exerci ses	Written Examinati on	In-class test (seen)	In-class test (unseen)
7	PGS7003-15	Establishing Positive Classroom Environments	С		Х		Х				Х				
7	PGS7004-15	How Pupils Learn	С		Х		Х				Х				
7	PGS7005-15	Adaptive Teaching	С		Х		Х				Х				
7	PGS7006-15	Inspiring Learning	С		Х		Х				Х				
N /A	PGS6000-00	QTS module	R				Х								
N /A	See programme content table	Subject and Curriculum Knowledge in all secondary subjects	R				Х								

[5] C = Core; R = Required; R* = Required*; O = Optional