

PROGRAMME SPECIFICATION

1. General information

Awarding body / institution	Leeds Trinity University
Teaching institution	Bradford College
'Parent' Faculty (ICE / BCDI / SHS)	Faculty of Social Sciences and Education
'Parent' School	School of Education
Professional accreditation body (if applicable)	N/A
Final award (eg. BA Hons)	Additional Diploma
Title of programme(s)	Teaching Mathematics and Numeracy
Subsidiary award(s) (if any)	N/A
Honours type (Single / Joint / Combined)	N/A
Duration and mode(s) of study	Part-time - 1 year
Month/year of approval of programme	April 2024
Start date (this version) (month and year)	September 2024
Periodic review next due (academic year)	2027-28
HECoS subject code(s)	100508 - post compulsory education and training 100460 - further education
UCAS course code & route code (available from Admissions)	Specific to each partnership/alliance, issued by UCASTT or successor organisation(s).
SITS codes (Course / Pathway / Route) (available from Student Administration)	
Delivery venue(s)	Bradford College

2. Aims of the programme

Rationale and general aims, including what is special about this programme (from the student's and a marketing perspective)

The Additional Diploma in Teaching Mathematics and Numeracy is aimed at qualified teachers in the FE sector (with a full L5 Education and Training qualification), or equivalent, who want specialist training to become maths and numeracy teachers. Trainees must have access to a minimum of 50 hours of teaching of maths and/or numeracy covering at least two different levels and an appropriately qualified maths teacher to act as a mentor. The programme is designed to equip trainees with the essential knowledge, values and skills to teach the subject specialism of Mathematics and Numeracy in the dynamic Further Education sector.

The principal aims of the programme are to:

- Provide a recognised L5 specialist qualification which enables teachers to work effectively in Mathematics and Numeracy provision within the Education and Training sector.
- Develop an understanding of concepts and theories underpinning Mathematics and Numeracy learning and enable trainees to relate this understanding to their practice and context.
- Produce competent, confident and ambitious Mathematics and Numeracy teachers who
 can apply subject specialist knowledge and skills to promote learning in Mathematics and
 Numeracy.
- Foster the development of values and skills associated with inclusive teaching and learning of Mathematics and Numeracy, aimed at facilitating individual progress and contributing to broader societal equity and justice in Bradford and West Yorkshire.
- Promote reflective practice on your professional role, responsibilities and values as a Mathematics and Numeracy teacher.

The Additional Diploma in Teaching Mathematics and Numeracy (Level 5) delivers an ambitious, contemporary curriculum for qualified teachers in and around the Bradford area who want to develop their specialist knowledge and skills to teach Mathematics and Numeracy. A key strength is our position in the heart of a thriving Further Education College and our strong relationships with College teams and mentors.

3. Student learning outcomes of the programme

Learning outcomes in terms of:

- knowledge and understanding (K)
- intellectual / cognitive / 'thinking' skills (I)
- practical skills specific to the subject (P)
- employability skills (postgraduate) (E) or attributes and skills (undergraduate) (AS)

The 'K1', etc codes are used in section 7b) and module descriptors to refer to each of these learning outcomes.

K. Knowledge and understanding

On successful completion of the programme, in addition to the sector's Professional Standards, successful students will be able to demonstrate knowledge and understanding of:

- K1 A range of contemporary theories and evidence-based pedagogical approaches to inclusive and impactful teaching and learning practice relevant to Mathematics and Numeracy provision in Further Education.
- K2 Subject specialist knowledge of mathematics and current theories relating to numeracy acquisition, as used in own teaching practice, informed by a range of relevant bodies and organisations.

I. Intellectual/Cognitive Skills

On completion of the programme successful students will be able to demonstrate the ability to:

- I1 Reflect on teaching practice and synthesise diverse knowledge, evidence and concepts in order to demonstrate the skills to plan for continuing professional development.
- 12 Demonstrate the academic and research skills required for study at Level 5.
- 13 Evaluate current issues impacting upon Mathematics and Numeracy provision in the Further Education sector and problem-solving in response.

P. Practical, professional or subject-specific skills

On completion of the programme successful students will be able to demonstrate the ability to:

- P1 Analyse and reflect on own skills and knowledge in order to create appropriate professional development planning in relation to Mathematics and Numeracy teaching and learning.
- P2 Create effective and stimulating opportunities for Mathematics and Numeracy learning, informed by relevant theoretical considerations, achieving relevant teaching standards.

Attributes and Skills Outcomes (undergraduate)

- AS1 **Working Independently** prioritising workload, anticipating and troubleshooting potential problems, and achieving this without requiring continual oversight from a supervisor or manager;
- AS2 **Research & Thinking Critically -** systematic investigation of resources to identify relevant information. Critical thinking refers to a process of independent scrutiny, allowing formation of a well-reasoned opinion for application of the research to decision-making and action;
- AS3 **Digital Confidence** identifying, learning and confident adoption of digital tools, applications and software to improve existing processes, meet emerging challenges or develop new approaches;
- AS4 **Adaptability** the ability to make the most of changing circumstances and adapt to new conditions;
- AS5 **Resilience** the ability to recognise that you will be exposed to adversity but that you will be able to respond positively and ultimately adapt and grow from challenging events;
- AS6 **Professional Outlook** preparing yourself to successfully research, plan and apply for opportunities through effectively articulating your skills and attributes whilst understanding how to present yourself in professional working environments to achieve your career goals;
- AS7 **Effective Communication** the ability to work cooperatively with others to achieve a group objective and the recognition that good leadership empowers achievement of collective goals through combined efforts;
- AS8 **Ethics, Diversity, Sustainability** making a positive impact on society and the environment as a whole:
- AS9 **Enterprise and Entrepreneurship** entrepreneurship is the application of enterprise behaviours, attributes and competencies into the creation of cultural, social, or economic value. Enterprise is generating and applying ideas that are practical when undertaking a new venture or project.

3a External benchmarks

Statement of congruence with the relevant published subject benchmark statements (including appropriate references to any PSRB, employer or legislative requirements)

All Bradford College programmes validated by Leeds Trinity University are congruent with the Frameworks for HE Qualifications (FHEQ) and, where appropriate, the Qualifications and Credit Framework (QCF) (formerly National Qualification and Credit Framework (NQF)).

Course development has been informed by the new framework of guidance for the Diploma in Teaching (Further Education and Skills) which is based on the occupational standards for Learning and Skills Teachers (2021). The framework has been developed on behalf of, and approved by, the Initial Teacher Education (ITE) Forum, which is convened by the Education and Training Foundation (ETF).

On successful completion of the qualification, graduates may wish to apply for the sector's professional status Qualified Teacher Learning and Skills (QTLS) which has parity with QTS but is applied for post-qualification. The eligibility criteria for QTLS is managed and updated by the Society for Education and Training.

4. Learning outcomes for subsidiary awards

Guidance	
N/A	N/A

5. Content

Summary of content by theme

(providing a 'vertical' view through the programme)

This Additional Diploma in Teaching Mathematics and Numeracy is aimed at qualified teachers in the FE sector (with a full L5 Education and Training qualification), or equivalent who want specialist training to become maths and numeracy teachers. It provides focussed teaching and learning sessions at times that those with a teaching contract find accessible.

The minimum 50 hours of teaching practice, covering at least 2 levels, is expected to be completed during the delivery of the two modules enabling the required developmental observations of teaching to occur.

The trainees are required to complete written reflections and action plans in response to both their own appraisal of practice and four observation reports compiled by link tutors (2 reports) and mentor (2 reports).

This will be assessed through submission of an electronic Teaching Practice portfolio for the 0 credit pass/fail 'Additional Diploma in Teaching Maths: Teaching Practice Portfolio' module at the end of the same semester as the final module, evidencing:

- 50 hours teaching in Mathematics authenticated by the mentor;
- 4 satisfactory teaching observations, including planning, teaching resources, observer reports and a post-session reflection; and

 An Action Plan detailing satisfactory development in teaching practice, judged as complete by the link tutor and mentor.

The intentional design of the curriculum facilitates meaningful connections between established educational theory and a trainee's evolving teaching practice. The ongoing portfolio development ensures a comprehensive evidence base aligned with sector standards.

Semester 1:

1. Mathematics Teaching and Learning (Semester 1: Sept-Dec)

- Examine a range of mathematics specific approaches to teaching and learning and evaluate their efficacy in practice.
- Analysis different types of mathematical understanding, e.g. Relational and Instrumental, alongside key elements of an effective mathematics learning experience.
- Common mathematical errors in learners' calculations and making teaching points from misconceptions, will be explored with reference to research.
- The importance of language and appropriate use of vocabulary in the teaching and learning of mathematics will be emphasized, including with ESOL learners.
- Strategies and resources to develop mathematical thinking including, effective
 questioning skills, use of low and high level questions, development of problem solving
 skills. Formative assessment strategies that promote further learning will be
 emphasised.

Semester 2:

2. Mathematics Theories and Frameworks (Semester 2: Jan-May)

- Personal maths histories and social perspectives will be explored including the factors influencing mathematics acquisition.
- The history, origins and status of mathematics (number) and the implications for curriculum development will be analysed, alongside the application of mathematics related learning theory and research, and evaluation of its efficacy.
- Context and the exploration of connections between mathematical topics and their application to real life problems will be examined. Different interpretations of 'mathematics' and 'numeracy' will be used to analysis Mathematics and numeracy curriculum developments, including embedding.

6. Structure

Duration: 1 year part-time

Semesters: Semester 1 (Sept-Dec), Semester 2 (Jan-May)

Total credit rating: 40 (20 ECTS)

Programme structure

Trainees must achieve 40 credits to complete the programme. You will work alongside part-time and full-time trainees on the pre-service and in-service Certificate in Education (Further Education) with Mathematics and Numeracy and Postgraduate Diploma in Education (Further Education) with Mathematics and Numeracy cohorts.

Part-time (In-Service)

Level 5

All Core modules

Semester 1	Semester 2
Mathematics Teaching	Mathematics Theories
and Learning	and Frameworks
XBRTED5062 (20 credits)	XBRTED5072 (20 credits)
	Additional Diploma in
	Teaching Maths and
	Numeracy: Teaching
	Portfolio
	XBRTED5200
	(0 credit Pass/Fail)*

^{*}The Teaching Practice Portfolio must be submitted at the end of Semester 2 alongside the Mathematics Theories and Frameworks (XBRTED5072) module and must be passed in order to achieve the award.

7. Learning, teaching and assessment

7a) Statement of the strategy for learning, teaching and academic experience for the programme

Informed by the LTAE Strategy 2022-26, the approach to learning, teaching, and the academic experience aims to foster curiosity, courage, confidence, and aspiration among all students. It emphasises the centrality of student well-being in every aspect of provision. The programme articulates clear expectations and intentions, appropriate to the undergraduate level of study and emphasises the cultivation, application, and exchange of knowledge, expertise, and skills within the specialised domain of education.

Teaching Approach: The teaching approach involves student-centred group sessions led by module tutors who demonstrate and model application of theory to practice. These face-to-face sessions are complemented by technological tools, making the learning experience contemporary and engaging. Tutors act as facilitators, encouraging peer learning and exchange of ideas, enabling trainees to take responsibility for their own learning. The trainees are expected to engage in wider background reading to facilitate deeper analysis and evaluation during teaching sessions.

The strategies employed include whole class teaching, teaching practice, group discussions, virtual learning environments, workshops, observations of teaching, and reflective practice. Peer observations, micro-teaching, and mentor support contribute to a comprehensive learning experience. Visiting speakers, written and verbal feedback, action planning, video/podcasts, social networks, and peer support are integrated to enhance the learning environment.

Wellbeing: The program provides ample space for engaging in meaningful dialogues related to practical aspects of teaching, fostering well-being and connections among students. This collaborative approach is essential, particularly in the field of teaching.

Scheduled Learning: Scheduled sessions specifically address professional development in teaching practice, covering essential topics such as safeguarding, embedding mathematics and numeracy, supporting specific needs, working with support staff, and adhering to government requirements on British Values.

Guided Independent Study: Guided independent study involves planning sessions, creating teaching resources, and studying academic modules. Trainees are required to track progress against the standards in a portfolio, with small group and individual tutorials provided for support.

Reflection: Trainee teachers engage in reflection and these skills are developed throughout the course of study. Tutors facilitate learning, encouraging trainees to question assumed knowledge and apply concepts to real-world scenarios. Background reading is essential to allow sessions to focus on analysis and evaluation.

Assessment Strategy Academic: The assessment strategy aligns with the undergraduate level requirements, requiring the development of personal academic skills alongside teaching skills. Written work must demonstrate a broad range of reading from academic sources, promoting research-led thinking and questioning. The integration of theory into practice stands as a central aspect, requiring not only critical reflection but also the ability to provide personalised responses to assignment briefs. The assessment requires trainees to apply theory to practice, fostering critical reflective skills. The assessment standards are set at a L5, demanding a comprehensive understanding of research and academic texts.

Assessment Strategy Teaching Practice: You will be assessed on teaching practice via observations conducted by teacher educators in collaboration with specialist mentors Constructive developmental feedback will be provided to guide you on areas for improvement in your practice, ensuring that by the end of the programme you are teaching at the expected level according to professional standards. The process nurtures the cultivation of teaching skills; as you progress, it is reasonable to expect that your competence will increase. The impact of training on both trainees and their students is closely monitored.

In summary, the learning, teaching, and assessment strategy is designed to provide a holistic and robust training experience for qualified teachers gaining a specialist qualification, focusing on professional development and well-being, academic excellence, and practical application of knowledge. The integration of various strategies and assessments ensures a well-rounded preparation for the challenging and dynamic field of teaching.

7b) Programme learning outcomes covered

	Assessed learning outcomes of the programme											Attributes and Skills							
Adjust LO codes as necessary. ✓	K 1	K2		I1	12	13		P1	P2		AS1	AS2	AS3	AS4	AS5	AS6	AS7	AS8	AS9
Lighter or hatched shading indicates modules that are not core, ie. not all students on this programme will undertake these.	Educational Theory	Subject specialist knowledge and skills		Critical Reflection	Acadmic/Research	Evaluate Issues		Planning for developmemt	Stimulating learning		Working Independently	Research & Thinking Critically	Digital Confidence	Adaptability	Resilience	Professional Outlook	Effective Communication	Ethics, Diversity, Sustainability	Enterprise and Entrepreneurship
Mathematics Teaching and Learning XBRTED5062																			
Mathematics Theories and Frameworks XBRTED5072																			

8. Entry requirements

Do the University's standard entry requirements apply (as outlined within the University's Admissions Policy)?

No

Detail of any deviation from and/or addition to the University's standard entry requirements (if applicable)

Applicants should normally have achieved the following prior to registration for the programme:

Admissions criteria

- A full teaching qualification (DET or equivalent).
- Confirmation of teaching hours and a suitable mentor.
- Level 3+ subject specific qualification.
- An eligible GCSE/Level 2 Maths and English qualification or equivalency*.
- · Relevant experience/prior learning.
- Enhanced DBS and health check, successful interview including an assessment of their maths or numeracy skills to assess their readiness for teaching.

*full list of eligible maths/English quals: Eligible maths and English qualifications | Society for Education and Training (et-foundation.co.uk)

9. Progression, classification and award requirements

Details of requirements for student progression between levels and receipt of the award(s) (A certain level of attainment which <u>must</u> be achieved in a specific module; any modules exempted from condonement, any deviation from the standard institutional stipulations for award classification, e.g. exclusion of Level 4 module marks from Foundation Degree classification)

Undergraduate assessment regulations apply with the following variance:

All modules on the qualification must be passed to ensure trainees meet the necessary occupational/professional standards and are not eligible for compensation/condonement. In addition, where a module is assessed by more than one component, all components must be passed at a minimum of 40%.

The non-credit bearing Additional Diploma in Teaching Maths and Numeracy: Teaching Practice Portfolio must be passed in order to achieve the award.

10. Prerequisites

Details o	of modules	students	<u>must</u> study	and achieve	credit for	before er	nrolling on	i a module a	at a higher	level, or
attaining	their final	programn	ne award							

N/A

11. Additional Support Needs

Arrangements made to accommodate students with additional support needs and any unavoidable restrictions on their participation in the programme/scheme

Students with disabilities or other support needs are welcome and are expected to be able to participate fully in this programme. Arrangements will be made, via the normal college support systems, to accommodate students with additional support needs wherever possible, with reasonable adjustments made to accommodate individual needs.