

APPLICATION FOR ETHICAL APPROVAL

RESEARCH STUDENTS

This form is to be completed by the student within **SIX** months for full-time students and **TWELVE** months for part time students, after the commencement of the research degree or following progression to Part Two of your course.

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

This document is also available in Welsh.

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity. Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

1	Full Name:	Qingyuan Yang			
2	Tick all boxes that apply:	Member of staff:	☐	Honorary research fellow:	☐
	Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student
3	Institute/Academic Discipline/Centre:	Education and humanities			
4	Campus:	Swansea			
5	E-mail address:	2413731@student.uwtsd.ac.uk			
6	Contact Telephone Number:				
For students:					

7	Student Number:	2413731
8	Programme of Study:	Doctorate of Education (EDD)
9	Director of Studies/Supervisor:	Dr. Catherine Morgan

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	YES	☒	NO	☐
					Date
2	If Yes, please indicate source of approval (and date where known): Approval in principle must be obtained from the relevant source prior to seeking ethical approval	Research Degrees Committee	☐		
		Institute Research Committee	☐		
		Other (write in) Dr. Catherine Morgan	☒		20/03/2025

SECTION C: Internal and External Ethical Guidance Materials

	Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.	
1	UWTSD Research Ethics & Integrity Code of Practice	☒
2	UWTSD Research Data Management Policy	☒
3	<i>BERA (2024) Research Design and Management in Education</i>	☒

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution	
2	Contact person name	
3	Contact person e-mail address	
4	Is your research externally funded?	YES ☐ NO ☐
5	Are you in receipt of a KESS scholarship?	YES ☐ NO ☐
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary YES ☐ NO ☐
7		Employed YES ☐ NO ☐
8	Is the research being undertaken within an existing UWTSD Athrofa Professional Learning Partnership (APLP)?	If YES then the permission question below does not need to be answered. YES ☐ NO ☐

9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot continue	YES	☐	NO	☐
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Where research activity is carried out in collaboration with an external organisation

10	Does this organisation have its own ethics approval system?	YES	☐	NO	☐
	If Yes, please attach a copy of any final approval (or interim approval) from the organisation (this may be a copy of an email if appropriate).				

SECTION E: Details of Research Activity

1	Indicative title:	Improvement of the Course Design of the "Digital Construction" Course in Higher Vocational Colleges in China			
2	Proposed start date:	November, 2025	Proposed end date:	2027	
	Introduction to the Research (maximum 300 words per section) Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the points below: <i>Purpose of Research Activity</i> <i>Proposed Research Question</i> <i>Aims of Research Activity</i> <i>Objectives of Research Activity</i> Demonstrate, briefly, how <u>Existing Research</u> has informed the proposed activity and explain <i>What the research activity will add to the body of knowledge</i> <i>How it addresses an area of importance.</i>				
3	Purpose of Research Activity The purpose of this study is to investigate how the <i>Digital Construction</i> course for Architecture, Construction, and Engineering (ACE) majors in higher vocational colleges in China can be enhanced to better meet industry requirements, improve student learning experiences, and address instructional challenges. By analysing employer expectations, student feedback, and teacher perspectives, this research aims to propose recommendations for optimising the course's curriculum structure, teaching methodologies, and assessment strategies. This study contributes to the ongoing discourse on aligning vocational education with industry needs, as emphasised by previous research on competency-based education and school-enterprise cooperation (Zhou and Xu, 2023). [1]Zhou, Y., and Xu, G. (2023) 'Vocational school–enterprise cooperation in China: a review of policy reforms, 1978–2022', <i>ECNU Review of Education</i>, 6(3), 433-450. (this box should expand as you type)				
4	Research Question Main research question: How can the design of the Digital Construction course for ACE majors be improved in higher vocational colleges in China? Sub-research questions: 1. To what extent do regional employers think that the Digital Construction course aligns with the ACE industry? 2. What do students perceive to be the strengths and weaknesses of the Digital Construction course? 3. What do teachers perceive to be the strengths and weaknesses of the Digital Construction course? (this box should expand as you type)				
5	Aims of Research Activity				

	This research aims to explore how the Digital Construction course for Architecture, Construction, and Engineering (ACE) majors in higher vocational colleges in China can be improved to better align with industry demands, enhance student learning experiences, and address teaching challenges. By examining employer expectations, student feedback, and teacher perspectives, this study seeks to develop recommendations for optimising the course's curriculum structure, pedagogical strategies, and assessment methods. (this box should expand as you type)
6	Objectives of Research Activity The objectives of this study are: 1. To evaluate industry alignment: Assess how well the Digital Construction course meets the needs of regional employers in the ACE industry and identify any skill gaps that graduates may have. 2. To analyse student perspectives: Investigate students' views on the strengths and weaknesses of the course, including curriculum content, teaching methods, and practical applications. 3. To examine teacher perspectives: Understand teachers' perceptions of the course's effectiveness, the challenges they face in delivering content, and the support they need for teaching digital construction technologies. 4. To identify best practices in course design: Explore successful models of digital construction education, both domestically and internationally, to inform improvements in curriculum development and instructional strategies. 5. To propose recommendations for improvement: Develop a framework for enhancing the course design, focusing on curriculum content, teaching methodologies, industry collaboration, and student assessment methods. (this box should expand as you type)
	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that may be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project.
7	This study adopts a pragmatic research paradigm, which emphasises the practical application of research findings and the selection of methods (Clarke and Visser, 2018) and employs a mixed methods approach to explore how the Digital Construction course for ACE majors in higher vocational colleges can be improved. A case study will be conducted, integrating multiple data collection methods to ensure a comprehensive view from stakeholder perspectives. Both quantitative and qualitative data analysis techniques are adopted to ensure thorough understanding of the chosen case. The case study will take place at a higher vocational college in Jiangsu, a relatively developed province in China, where educational reforms and industry-education integration are relatively more advanced. Participants will include students enrolled in the course (who are not the author's students), who can offer insights into their learning experiences, perceived strengths, and challenges. Teachers responsible for delivering the course will be selected to provide perspectives on curriculum effectiveness, teaching methodologies, and the difficulties faced in integrating digital construction technologies. Additionally, regional employers and industry professionals from the ACE sector will be included to assess whether the course aligns with industry needs and to identify any skill gaps that graduates may have. The methodology consists of three primary research instruments: 1. Student Questionnaire • Participants: 30 students enrolled in the "Digital Construction" course • Purpose: To assess students' perceptions of the strengths and weaknesses of the course • Format: A structured questionnaire with a mix of multiple-choice and open-ended questions • Content: The questionnaire will focus on course content relevance, teaching methods, practical applications, challenges faced, and suggestions for improvement. • Data Collection: The questionnaire will be distributed electronically or in print, depending on students' accessibility and convenience. • Analysis: Descriptive and thematic analysis will be used to identify key trends and recurring themes in student responses. 2. Focus Group Discussions with Students

	• Participants: A subset of the 30 students (approximately 6-8 per session) • Number of Sessions: 4-5 focus group discussions • Purpose: To gain deeper insights into student experiences, challenges, and expectations regarding the course • Format: Semi-structured discussion guided by key themes identified from the questionnaire responses • Topics Discussed: Course structure, practical components, teaching methodologies, alignment with industry needs, and recommended improvements • Data Collection: The discussions will be audio-recorded (with participants' consent) and transcribed for analysis. • Analysis: Thematic analysis will be conducted to extract common patterns and unique insights from student perspectives. 3. Teacher Interviews • Participants: 3 teachers from the vocational college (colleagues of the researcher but not from the same major) • Purpose: To explore teachers' perceptions of the course's strengths, weaknesses, and potential improvements • Format: Semi-structured, one-on-one interviews • Content: Teaching methods, instructional challenges, student engagement, industry relevance, and pedagogical improvements • Data Collection: Interviews will be recorded and transcribed for analysis. • Analysis: A qualitative thematic analysis will be conducted to identify recurring themes and areas for course enhancement. 4. Industry Professional Interviews • Participants: 5 professionals from the construction industry, including construction site engineers, project managers, and enterprise managers • Purpose: To assess the alignment of the "Digital Construction" course with industry needs and expectations • Format: Semi-structured interviews conducted in person or online • Content: Industry requirements, skills gaps, evaluation of course content relevance, and recommendations for curriculum improvement • Data Collection: Interviews will be audio-recorded, transcribed, and analyzed. • Analysis: Thematic analysis will be used to categorize industry insights into key findings. Data Analysis and Interpretation A combination of quantitative and qualitative methods will be used to analyse the collected data: • Quantitative Analysis: The student questionnaire responses will be analysed using statistical tools, including descriptive statistics (percentages, mean scores, and frequency distributions) to identify patterns and general trends. • Qualitative Analysis: Thematic analysis will be applied to interview transcripts and focus group discussions to extract common themes and insights from teachers, students, and industry professionals. [1]Clarke, E. and Visser, J. (2018) 'Pragmatic research methodology in education: possibilities and pitfalls', <i>International Journal of Research & Method in Education</i>, 42(5). Doi: 10.1080/1743727X.2018. 1524866. (this box should expand as you type)
	Location of research activity Identify all locations where research activity will take place.
8	A higher vocational college in southern part of China (this box should expand as you type)
	Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants. If you live in the country where you will do the research then please state this.

9	Although research activity will take place overseas, it will follow the UK ethical guidelines since there is no specific ethical issues raised by the local context. <i>(this box should expand as you type)</i>
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10	Use of documentation not in the public domain: Are any documents NOT publicly available?	NO	☒
		YES	☐
11	If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with the current data protection law of the country in question and that of England and Wales. <i>(this box should expand as you type)</i>		

	Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?	YES	NO
12	A prosperous Wales	☐	☒
13	A resilient Wales	☐	☒
14	A healthier Wales	☐	☒
15	A more equal Wales	☐	☒
16	A Wales of cohesive communities	☐	☒
17	A Wales of vibrant culture and thriving Welsh language	☐	☒
18	A globally responsible Wales	☐	☒
19	If YES to any of the above, please give details:		
	<i>(this box should expand as you type)</i>		

SECTION F: Scope of Research Activity

	Will the research activity include:	YES	NO
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☒	☐
3	Use of focus groups?	☒	☐
4	Use of participant diaries?	☐	☒
5	Use of video or audio recording?	☒	☐
6	Use of computer-generated log files?	☐	☒
7	Participant observation with their knowledge?	☒	☐
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒

11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.	☐	☒
	Details of any other primary data collection method: (this box should expand as you type)		

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

If there are no participants then do not complete this section, but go directly to section H.

	Who are the intended participants:	YES	NO
1	Students or staff at the University?	☐	☒
2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.	☐	☒
	Details of any other participant groups: (this box should expand as you type)		

	Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?	
10	How many participants are expected?	For questionnaire, 30 students. For focus group discussion, 30 students (divided into 4–5 groups of 6–8 students per group).

		For interviews, 3 teachers and 5 professionals (construction site engineers, project managers, enterprise managers) (this box should expand as you type)
11	Who will the participants be?	students, teachers, industry professionals (this box should expand as you type)
12	How will you identify the participants?	Participants will be identified using purposive sampling (Ames, Glenton and Lewin, 2019), ensuring that they have relevant experience and perspectives related to the "Digital Construction" course. Student selection criteria: • Must be currently enrolled in the "Digital Construction" course. • Must be from the Architecture, Construction, and Engineering (ACE) majors. • A mix of students with different academic performance levels and backgrounds to ensure diverse perspectives. • Not a student of the researcher. Teacher selection criteria: • Must be faculty members at the vocational college. • Must have experience teaching Digital Construction. • Must have knowledge of digital construction trends or teaching digital tools. Industry professional selection criteria: • Must be actively working in the construction industry. • Must hold a relevant position such as construction site engineer, project manager, or enterprise manager. • Must have knowledge of digital construction technologies and industry expectations for graduates. • Better from the enterprises collaborating with the school. [1]Ames, H., Glenton, C., and Lewin, S. (2019) 'Purposive sampling in a qualitative evidence synthesis: A worked example from a synthesis on parental perceptions of vaccination communication', <i>BMC medical research methodology</i>, 19, 1-9. (this box should expand as you type)

	Information for participants:	YES	NO	N/A
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☒	☐	☐
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			
	(this box should expand as you type)			

	Information for participants:	YES	NO	N/A
24	Will participants be paid?	☐	☐	☒
25	Is specialist electrical or other equipment to be used with participants?	☐	☐	☒
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☐	☒
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☐	☒
28	If YES to any question, please provide full details			
(this box should expand as you type)				

SECTION H: Anticipated Risks

Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them. If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.					
1	Full risk assessment completed and appended? <table border="1"> <tr> <td>Yes</td> <td>☐</td> </tr> <tr> <td>No</td> <td>☒</td> </tr> </table>	Yes	☐	No	☒
Yes	☐				
No	☒				
2	Risks to participants For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information <table border="1"> <tr> <td> Risk to participants: 1. Risks to Students: • Psychological discomfort: Students may feel uncomfortable sharing negative feedback about the course, especially if they fear it could affect their academic standing. • Confidentiality concerns: Students might worry that their responses will be shared with instructors, leading to potential bias. • Peer pressure in focus groups: Some students may feel hesitant to express differing opinions in front of their classmates. 2. Risks to Teachers: • Professional reputation concerns: Teachers may worry that their critiques of the course could be seen as criticism of their colleagues or institution. • Job security concerns: If teachers express concerns about curriculum design, they may fear potential professional evaluation. 3. Risks to Industry Professionals: • Confidentiality of company policies: Industry professionals might be hesitant to share certain insights if they involve company-specific strategies or challenges. </td> <td> <i>How you will mitigate the risk to participants:</i> 1. Mitigation Strategies to Student Risks: • Responses will be anonymous in the questionnaire to encourage honest feedback. • During focus group discussions, students will be reminded that their participation is confidential. • Students will be explicitly assured that their participation or responses will not impact their grades or treatment in the course. • Participation is voluntary, and students can withdraw before the research ends without any consequences. 2. Mitigation Strategies to Teacher Risks: • Interviews will be confidential, and responses will be anonymised in the final report. • Participants will be given the option to review the transcripts of their interviews. • Participation is voluntary, and teachers can refuse to answer any questions they feel uncomfortable with. 3. Mitigation Strategies to Professional risks: • No company sensitive information will be requested, and participants will be reminded that they can decline to answer any questions. • The interview schedule will be flexible, accommodating the availability of professionals. </td> </tr> </table>	Risk to participants: 1. Risks to Students: • Psychological discomfort: Students may feel uncomfortable sharing negative feedback about the course, especially if they fear it could affect their academic standing. • Confidentiality concerns: Students might worry that their responses will be shared with instructors, leading to potential bias. • Peer pressure in focus groups: Some students may feel hesitant to express differing opinions in front of their classmates. 2. Risks to Teachers: • Professional reputation concerns: Teachers may worry that their critiques of the course could be seen as criticism of their colleagues or institution. • Job security concerns: If teachers express concerns about curriculum design, they may fear potential professional evaluation. 3. Risks to Industry Professionals: • Confidentiality of company policies: Industry professionals might be hesitant to share certain insights if they involve company-specific strategies or challenges.	<i>How you will mitigate the risk to participants:</i> 1. Mitigation Strategies to Student Risks: • Responses will be anonymous in the questionnaire to encourage honest feedback. • During focus group discussions, students will be reminded that their participation is confidential. • Students will be explicitly assured that their participation or responses will not impact their grades or treatment in the course. • Participation is voluntary, and students can withdraw before the research ends without any consequences. 2. Mitigation Strategies to Teacher Risks: • Interviews will be confidential, and responses will be anonymised in the final report. • Participants will be given the option to review the transcripts of their interviews. • Participation is voluntary, and teachers can refuse to answer any questions they feel uncomfortable with. 3. Mitigation Strategies to Professional risks: • No company sensitive information will be requested, and participants will be reminded that they can decline to answer any questions. • The interview schedule will be flexible, accommodating the availability of professionals.		
Risk to participants: 1. Risks to Students: • Psychological discomfort: Students may feel uncomfortable sharing negative feedback about the course, especially if they fear it could affect their academic standing. • Confidentiality concerns: Students might worry that their responses will be shared with instructors, leading to potential bias. • Peer pressure in focus groups: Some students may feel hesitant to express differing opinions in front of their classmates. 2. Risks to Teachers: • Professional reputation concerns: Teachers may worry that their critiques of the course could be seen as criticism of their colleagues or institution. • Job security concerns: If teachers express concerns about curriculum design, they may fear potential professional evaluation. 3. Risks to Industry Professionals: • Confidentiality of company policies: Industry professionals might be hesitant to share certain insights if they involve company-specific strategies or challenges.	<i>How you will mitigate the risk to participants:</i> 1. Mitigation Strategies to Student Risks: • Responses will be anonymous in the questionnaire to encourage honest feedback. • During focus group discussions, students will be reminded that their participation is confidential. • Students will be explicitly assured that their participation or responses will not impact their grades or treatment in the course. • Participation is voluntary, and students can withdraw before the research ends without any consequences. 2. Mitigation Strategies to Teacher Risks: • Interviews will be confidential, and responses will be anonymised in the final report. • Participants will be given the option to review the transcripts of their interviews. • Participation is voluntary, and teachers can refuse to answer any questions they feel uncomfortable with. 3. Mitigation Strategies to Professional risks: • No company sensitive information will be requested, and participants will be reminded that they can decline to answer any questions. • The interview schedule will be flexible, accommodating the availability of professionals.				

	• Time constraints: Industry professionals may find participation time-consuming. <i>(this box should expand as you type)</i>	• A concise, well-structured interview guide will ensure that their time is used efficiently. <i>(this box should expand as you type)</i>
3	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities	
	The research will not include any issue above. <i>(this box should expand as you type)</i>	
4	Risks to the investigator For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest	
	Risk to the investigator: 1. Reputational Risk: The investigator's reputation may be jeopardised if the research is perceived as biased, poorly executed, or if any ethical concerns arise. 2. Collaboration Issues: Challenges in collaboration with teachers, students, or industry professionals may arise, leading to conflicts, miscommunications, or less support, which could impact the research outcomes. 3. Resistance from faculty or administration: Some teachers or administrators may view the study as a critique of the current curriculum, leading to reluctance in cooperation. <i>(this box should expand as you type)</i>	How you will mitigate the risk to the investigator: 1. Follow ethical guidelines rigorously to enhance credibility. Document all researcher processes to ensure transparency. 2. Clearly outline the participants' responsibilities and expectations for all collaborators at the beginning of the project to minimise misunderstandings. 3. Obtain institutional approval before conducting research to ensure transparency and institutional support. Clearly communicate that the study aims to enhance the course rather than criticise it. <i>(this box should expand as you type)</i>
5	University/institutional risks For example: adverse publicity, financial loss, data protection	
	Risk to the University: 1. The university's reputation could be affected if the research is perceived as unethical, poorly conducted, or if it yields controversial findings. 2. If participant data is mishandled, it could violate UWTSD's data protection policies and the UK General Data Protection Regulation (GDPR), leading to potential legal or reputational consequences. <i>(this box should expand as you type)</i>	How you will mitigate the risk to the University: 1. Keep high research and ethical standards throughout the research process to enhance credibility. 2. Establish comprehensive ethical framework for conducting research, outlining the responsibilities of investigators in managing participant data and. <i>(this box should expand as you type)</i>
6	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems	
	Risk to the environment: Excessive use of printed materials (e.g., consent forms, questionnaires, transcripts) increases paper waste, contributing to environmental harm. <i>(this box should expand as you type)</i>	How you will mitigate the risk to environment: Use electronic data collection whenever possible: • Distribute questionnaires online. • Store interview transcripts digitally rather than printing them. • Obtain e-signatures instead of physical signatures on consent forms. <i>(this box should expand as you type)</i>
Disclosure and Barring Service		

	If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
7	Does your research require you to hold a current DBS Certificate?	☐	☐	☒
8	If YES, please give the certificate number. If the certificate number is not available please write "Pending"; in this case any ethical approval will be subject to providing the appropriate certificate number.			

SECTION I: Feedback, Consent and Confidentiality

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when?
	1. Students (Questionnaire & Focus Group Discussions) A de-briefing statement will also be provided to each student after they complete the questionnaire. This statement will include the study's aims, how their responses will be analysed, and a reassurance that they can withdraw their responses until the study is concluded. A summary report of the findings will be shared with the students via email. This report will highlight the key themes discovered through the questionnaires and focus group discussions and how this information will be used to enhance the "Digital Construction" course. 2. Teachers (Interviews) A brief oral de-briefing will be provided after the interview. The researcher will clarify that their responses will remain confidential and anonymous and explain the overall process of data analysis. Feedback will be provided to each teacher via email 2-3 months after the completion of data collection. This feedback will include an overview of the study's findings, especially highlighting any recommendations that could improve course delivery from a teaching perspective. 3. Industry Professionals (Interviews) An oral de-briefing will occur at the end of each interview, where the researcher will briefly explain the purpose of the study again and how their responses will be kept confidential and used. <i>(this box should expand as you type)</i>
2	Informed consent Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.
	The researcher will state the objectives of the research, the expectations and procedural details to support the informed consent. All participants will be given with a detailed information sheet outlining the study's aim, procedures, benefits, risks, and their right to withdraw at any time until the data concluded. Participants will be given sufficient time to review the sheet and ask any questions before hand in. This ensures that participants are fully aware of the consequences of their interviews, focus group discussions and questionnaires. Participants will be informed about how their data will be used and the steps taken to ensure their anonymity and confidentiality. This will be included in the consent forms they sign prior to participation. This consent sheet will include: • Objectives of the research study • Description of activities they will be involved in (e.g., surveys, interviews, classroom observations) • Duration of participation and what is expected from them • Any potential risks and benefits associated with participation • How their data will be used, stored, and reported Assurance of anonymity and confidentiality measures in place <i>(this box should expand as you type)</i>
3	Confidentiality / Anonymity

	Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.
	All data collected will be confidential. Participants' identities will be protected through anonymisation techniques, such as assigning unique identification codes instead of using names. Transparency and confidentiality procedures will be detailed in all consent forms, improving participant trust and data security. All personal identifiers (such as names, email addresses, student IDs, etc.) will be removed or replaced with unique codes before data analysis and publication. This prevents the identification of individual participants in any output. In qualitative results, pseudonyms may be used to refer to participants, ensuring that their actual identities are not disclosed. <i>(this box should expand as you type)</i>

SECTION J: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 "GDPR" and the Data Protection Act 2018 "DPA")?	YES	NO
1	"Personal data" means any information relating to an identified or identifiable natural person ('data subject'). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.	☒	☐
	If YES, provide a description of the data and explain why this data needs to be collected:		
2	The personal data to be collected for this research includes: 1.For Students (Questionnaires & Focus Group Discussions): It is important to understand how well the course meets students' needs and expectations, which will guide recommendations for course improvement. • Personal Identifiers: Academic background (e.g., year of study, program of study), but only when necessary to identify participants for specific tasks (e.g., selecting participants for focus groups). • Course-related data: Information about their experiences with the Digital Construction course, such as perceived strengths and weaknesses. • Demographic Information: Basic demographic details such as gender or educational background (e.g., ACE major, vocational specialisation). 2.For Teachers (Interviews): Collecting feedback from teachers on the course's design and their teaching experiences is essential to gather a holistic perspective on the course's strengths and weaknesses from the teaching side. • Personal Identifiers: Professional background (e.g., current role, department). • Teaching Experience Data: Their professional views and feedback regarding the Digital Construction course, their experience teaching the course. 3.For Industry Professionals (Interviews): Feedback from industry professionals provides critical insights into whether the course content is aligned with industry standards and expectations. • Personal Identifiers: Professional role (e.g., construction site engineer, project manager), employer/organisation name. • Professional Experience Data: Feedback on how well the Digital Construction course aligns with the industry's needs, their professional perspectives on the course curriculum. Recordings of interviews and discussions with students, teachers, and industry professionals will be collected too, considering gain deeper insights into the experiences and opinions of participants regarding the teaching strategies and their effectiveness.		

	The data collected from all groups is integral to identifying gaps and aligning the course content and delivery with current industry standards. By understanding the experiences of students, the views of teachers, and feedback from industry professionals, the research will propose evidence-based improvements to the course design. <i>(this box should expand as you type)</i>		
	Does it involve special category data (as defined by the GDPR)?	YES	NO
3	“Special category data” means sensitive personal data consisting of information as to the data subjects’ – (a) racial or ethnic origin, (b) political opinions, (c) religious beliefs or other beliefs of a similar nature, (d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) physical or mental health or condition, (f) sexual life, (g) genetics, (h) biometric data (as used for ID purposes),	☐	☒
	If YES, provide a description of the special category data and explain why this data needs to be collected:		
4	 <i>(this box should expand as you type)</i>		

	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	YES	NO
5	Manual files (i.e. in paper form)?	☒	☐
6	University computers?	☐	☒
7	Private company computers?	☐	☒
8	Home or other personal computers?	☐	☒
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☒	☐
10	“Cloud” storage or websites?	☐	☒
11	Other – specify:	☐	☒
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation: Data collected will be stored securely and accessed only by the researcher. Appropriate measures will be implemented to prevent data breaches and ensure the privacy of participants. Data will be stored securely on password-protected computers and hard drives in the office with authorised access to personnel only. The device and system used to store or access the data will be protected with strong, unique passwords. Passwords will be regularly updated and follow best practices. Personal identifiers will be removed from the data, so that the data cannot be linked back to individual participants. In cases where anonymisation is not feasible, pseudonyms will be assigned to participants. <i>(this box should expand as you type)</i>		

	Data Protection		
	Will the research activity involve any of the following activities:	YES	NO
13	Electronic transfer of data in any form?	☒	☐
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒

15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☒	☐
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☐	☒
18	Publication of data that might allow identification of individuals?	☐	☒
19	Use of data management system?	☐	☒
20	Data archiving?	☐	☒
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate):		
	Electronic transfer of data: Explicit consent will be obtained from participants to process and transfer their data electronically, in line with GDPR requirements. Only data that is necessary for the research will be collected and transferred. Participants will be encouraged to provide only the information relevant to the study, reducing the risk of excessive data processing. All electronic data transfers will use secure encryption methods to protect the data in transit. This includes using protocols for web-based transfers and encrypted email services to ensure that data cannot be intercepted during transmission. Access to electronic data will be limited to the researcher only. An incident response plan will be established for any potential data breaches, including notifying affected participants and relevant authorities as required by GDPR. Importing of data from outside the UK: Before importing data, conduct a Transfer Impact Assessment to evaluate the potential risks associated with the data transfer. The researcher will ensure that participants are informed about potential transfers of their data outside the UK and provide explicit consent for such transfers. The researcher will use secure method (the data will be in the laptop computer with the researcher when travel to the UK) for transferring data. <i>(this box should expand as you type)</i>		
22	List all who will have access to the data generated by the research activity:		
	Only the researcher will have access to the data generated by the research activity. <i>(this box should expand as you type)</i>		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	Only the researcher will have control of, and act as custodian(s) for, data generated by the research activity. <i>(this box should expand as you type)</i>		
24	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
	Data collected will be stored securely and accessed only by the researcher. Data will be stored securely on password-protected computers and hard drives in the office with authorised access to personnel only. All data will be deleted securely after the completion of the study, adhering to data protection regulations. <i>(this box should expand as you type)</i>		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. <i>(Most relevant to academic staff)</i>		
	N/A. <i>(this box should expand as you type)</i>		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	YES	☒
27	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	YES	☒

SECTION K: Declaration

	The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	Signature of applicant:	Qingyuan Yang	Date: 31/03/2025

For STUDENT Submissions:

2	Director of Studies/Supervisor:		Date:
3	Signature:		

For STAFF Submissions:

4	Academic Director/ Assistant Dean:		Date:
5	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☒	I have read the guidance notes supplied before completing the form.
☒	I have completed ALL RELEVANT sections of the form in full.
☒	I confirm that the research activity has received approval in principle
☒	I have attached a copy of final/interim approval from external organisation (where appropriate)
☒	I have attached a full risk assessment (where appropriate) ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT
☒	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☒	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.

RESEARCH STUDENTS ONLY

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.