LEEDS BECKETT UNIVERSITY

Course Specification

MSc Advanced Cyber Security & Digital Forensics

Course Code: MACSD

2026/27

leedsbeckett.ac.uk

MSc Advanced Cyber Security & Digital Forensics (MACSD)

Applicant Facing Course Specification for 2026/27 Postgraduate Entrants

Confirmed at

General Information

Award	Master of Science Advanced Cyber Security and Digital Forensics
Contained Awards	Postgraduate Diploma Advanced Cyber Security and Digital Forensics Postgraduate Certificate Advanced Cyber Security and Digital Forensics
Awarding Body	Leeds Beckett University
Level of Qualification and Credits	Level 7 of the Framework for Higher Education Qualifications, with 180 credit points at Level 7 of the Higher Education Credit Framework for England.
Course Lengths and Standard Timescales	Start dates will be notified to students via their offer letter. The length and mode of delivery of the course is confirmed below: • 12 months (full-time, campus based, Sept start only) • 24 months (full time, campus based, Sept start only, with 30-week work placement)
Location(s) of Delivery	The majority of teaching will be at Headingley campus but on occasion may be at City campus
Entry Requirements	Admissions criteria are confirmed in your offer letter. Details of how the University recognises prior learning and supports credit transfer are located here: https://www.leedsbeckett.ac.uk/student-information/course-information/recognition-of-prior-learning/ Admissions enquiries may be directed to: AdmissionsEnquiries@leedsbeckett.ac.uk.
Course Fees	Course fees are confirmed in your offer letter. A breakdown of any additional costs is included on the online prospectus entry for this course.

Fees enquiries may be directed to Fees@leedsbeckett.ac.uk.

Policies, Standards and Regulations (https://www.leedsbeckett.ac.uk/our-university/public-information/academic-regulations/)

There are no additional or non-standard regulations which relate to your course.

Professional Accreditation or Recognition Associated with the Course

Professional Body British Computer Society (BCS) - The Chartered Institute for IT.

'In Year' Work Placement Information

Summary

The course contains a placement year.

Minimum 30 weeks, undertaken at the end of semester 2 after the completion of taught modules. On returning from placement students will be expected to complete their Dissertation.

Placement Delivery

Leeds Beckett is dedicated to improving the employability of our students and one of the ways in which we do this is to support our students to gain valuable work experience through work based placements. Our Placements team have developed strong links with companies, many of whom repeatedly recruit our students into excellent placement roles. Our team is dedicated to supporting students through every stage of the placement process.

Location

Students are responsible for obtaining their own placement, with assistance from the University. The locations will vary, dependant on the opportunity.

Approval

Whilst students source their own placements, they will need to meet requirements which will be outlined before module enrolment.

Timetable Information

Timetables for Semester 1 will be made available to students during induction week via:

i) The Student Portal (MyBeckett)
ii) The Leeds Beckett app

Any difficulties relating to timetabled sessions may be discussed with your Course Administrator.

Key Contacts

Your Course Director	Dr Pip Trevorrow
Your Course Administrator	Claire Howson – C.Howson@leedsbeckett.ac.uk

Accreditation/ Recognition Summary

A graduate meets some or all of the educational requirements for registration with BCS as a Chartered IT Professional (CITP). BCS will not accredit until graduates have exited the award.

Course Overview

Aims

The aim of this MSc course is to give students critical knowledge within the cyber security and digital forensics domains, combining academic principles and industrial needs. This MSc course is informed by current research in cyber security and digital forensics and is underpinned by industry partners such as local and national law enforcement and security organisations.

The MSc focuses on specialised areas of both disciplines and therefore prior knowledge in cyber security (to degree level) is required, with a desire for a similar background in digital forensics.

Cyber Security and Digital Forensics are the key challenging areas in contemporary computing, due to the advances in the technologies of network communications and computer hardware and software.

Students will gain specialism in the challenging areas of digital forensics such as image and video forensic investigations. In security areas students will gain knowledge and expertise in software security exploitation development and the analysis and implementation of security mechanisms to defend and analyse systems. The course also develops students' knowledge in research practices and advanced scholarship as well as project development and management. The specialisation gained through the taught modules is further developed through a research or practical based MSc dissertation project.

Course Learning Outcomes

At the end of the course, students will be able to:

1	Deal with complex problems, and demonstrate critical evaluation of theoretical and practical issues associated with the implementation and testing of cyber security and digital forensics methods, and justify these based on professional, ethical and legal requirements.
2	Demonstrate a critical analysis of current issues and new technologies within the field of cyber security and digital forensics.
3	Demonstrate originality in the application of knowledge and techniques to create and interpret knowledge in the area of cyber security and digital forensics.
4	Demonstrate originality and synthesis in the application of theory and techniques, drawn from earlier studies, through the production of the dissertation/project, a significant piece of high level independent work.

Teaching and Learning Activities

Summary

This is a very hands-on subject area where theory alone would be unlikely to allow a student to achieve successful employment in this field. Practical exercises allow for students to implement their theoretical learning and see how it relates to industry. Practical solutions are achieved through the replication of exercises such as compromised computer systems and mobile devices that students must analyse – similar to that as found in industry. Many of these examples are available through open source community projects but are also built in-house when suitable external material is not available.

The VLE is the primary tool for delivering the study material with extensive links to other sites. The VLE is also the primary tool for submitting assessments – via TurnItIn. The VLE provides internal links to self-assessment activities, mainly quizzes, to enable students to check their own progress. The VLE will be used to post announcements and email students. All work will be placed here so that students will be able to access any resources made available.

Learning and teaching methods will provide high quality learning opportunities that enable students to demonstrate achievement of the learning outcomes of the course. In particular, these focus upon professional practice and practical problem based assessments. Students will be given the opportunity to demonstrate their learning through a variety of mechanisms including reports and practical undertakings.

The course utilises professional tools and guidelines from industry and professional bodies to inform the teaching methodologies and resources of the award. To enable students to fully utilise these methodologies, the award is structured to develop the students understanding of the key concepts of theory and practical process. The building of this knowledge and feedback for assessments undertaken by students allows the building of a greater understanding of the subject area.

The course aims to foster the development of independent study skills and autonomy of learning and encourage a commitment to lifelong learning and continuous professional development. Teaching and learning methods increasingly promote the capacity for students to assume responsibility for their own learning and development. Progressive use of project based integrated assessment and product/problem based learning allow students to take on greater self-direction of their learning. Students develop their research, problem solving and critical analysis skills by understanding the concepts of research practice and ethical issues as well as project management skills. The dissertation module finally brings together all the knowledge and techniques gained through the taught modules for the students to demonstrate all the specialised skills and understanding into a practical or research-based project.

Students must also develop subject specific skills that are marketable in the short to medium term as well as more general skills that will facilitate their future development and continuous learning. The course supports the latter through identification of appropriate skill sets and these are developed through the programme of study and assessment methods. In particular emphasis is placed on a student's ability to critically analyse the subject area and their ability to effectively communicate their understanding of the process.

The course employs a wide range of learning opportunities and teaching methods, informed by curriculum review, pedagogic research, and continuous staff development. Innovative approaches to teaching, learning and assessment are encouraged. The course seeks to expand the application of technology in the delivery of teaching and learning support.

Scheduled sessions will include the use of lectures, lab exercises and discussion groups, and advantage will be taken of both technology and supportive activities to ensure that effective learning takes place. These activities will include the use of simulations, case studies, projects, practical work, peer tutoring, peer group interaction, self-managed teams and learner managed learning.

The learning and teaching methods used are identified in the descriptor for each of the modules. The contextualisation of the learning and teaching strategy of each award is the sum of the learning and teaching methods of the modules that constitute the programme of study towards that award. These methods will promote the broad learning strategy of the University and the School, which are under constant review and refreshment. This is tested at least annually for fitness for purpose and integrity of the student learning experience for the award.

The type and range of assessments have been designed to require students to think deeply about practical scenarios and to evaluate problems and prescribe solutions appropriate to a professional practitioner.

This course will feature a mix of blended learning, both online and in-person. Lectures will be a mix of recorded and live. Tutorial/Seminar sessions will all be in-person as per the timetable

Your Modules

This information is correct for students progressing through the programme within standard timescales. Option modules listed are indicative of a typical year. There may be some variance in the availability of option modules. Students who are required to undertake repeat study may be taught alternate modules which meet the overall course learning outcomes. Details of module delivery will be provided in your timetable.

Full Time Delivery

Level 7
Compulsory modules

Module title	Credits	Semester/ teaching period
Reverse Engineering and Malware Analysis	20	S1
Forensic Multimedia Processing	20	S1
Research Practice	20	S1
Software Security and Exploitation	20	S2
Project Management	20	S2
Dissertation	60	S3
Number of credits of compulsory modules	160	

Option modules

Module title	Credits	Semester/ teaching period
Critical Perspectives on Information	20	S2
Intelligent Systems and Robotics	20	S2
Software Engineering for Service Computing	20	S2
Number of credits of option modules a student should choose	20	

Assessment Balance and Scheduled Learning and Teaching Activities

The assessment balance and overall workload associated with this course are calculated from core modules and typical option module choices undertaken by students on the course. They have been reviewed and confirmed as representative by the Course Director but applicants should note that the specific option choices students make may influence both assessment and workload balance.

A standard module equates to 200 notional learning hours, which may be comprised of teaching, learning and assessment, any embedded placement activities and independent study. Modules may have more than one component of assessment.

Assessment

On this course students will be assessed primarily by coursework, with some elements of project work and a final dissertation.

Workload

Overall Workload	
Teaching, Learning and Assessment	229 hours
Independent Study	1571 hours
Placement (optional)	30 weeks