



LEEDS  
BECKETT  
UNIVERSITY

# Course Specification

## MSc Cyber Security

Course Code:MCYBS

2021/22

## ***MSc Computer Security (MCYBS)***

### **Material Information Summary for 2021/22 Postgraduate Applicants**

Confirmed at 05/2021

<b>Award</b>	Master of Science Cyber Security
<b>Contained Awards</b>	Postgraduate Certificate Cyber Security Postgraduate Diploma Cyber Security
<b>Awarding Body</b>	Leeds Beckett University
<b>Level of Qualification &amp; Credits</b>	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 & Standard Timescales**

Start dates will be notified to students via their offer letter. The length of the course is confirmed below and modes of delivery will be confirmed prior to the start date in line with Government guidance:

- 3 years (part time, distance learning based)

<b>Location of Delivery</b>	Distance Learning
<b>Entry Requirements</b>	Admissions criteria are confirmed in your offer letter. Details of how the University recognises prior learning and supports credit transfer are located here: <a href="http://www.leedsbeckett.ac.uk/studenthub/recognition-of-prior-learning">www.leedsbeckett.ac.uk/studenthub/recognition-of-prior-learning</a> .  Admissions enquiries may be directed to: <a href="mailto:AdmissionsEnquiries@leedsbeckett.ac.uk">AdmissionsEnquiries@leedsbeckett.ac.uk</a> .
<b>Course Fees</b>	Course fees and any additional course costs are confirmed in your offer letter. Fees enquiries may be directed to <a href="mailto:Fees@leedsbeckett.ac.uk">Fees@leedsbeckett.ac.uk</a> .

## Timetable Information

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

- i) The Student Outlook Calendar
- ii) The Student Portal (MyBeckett)
- iii) The Leeds Beckett app

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

**Policies, Standards and Regulations** ([www.leedsbeckett.ac.uk/academicregulations](http://www.leedsbeckett.ac.uk/academicregulations))

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

## Key Contacts

**Your Course Director** Dr Pip Trevorrow ([p.trevorrow@leedsbeckett.ac.uk](mailto:p.trevorrow@leedsbeckett.ac.uk))

**Your Academic Advisor** Each Student will be allocated an Academic Advisor once they commence their studies at the University. The Academic Advisor will be a member of the Computing Academic Staff.

**Your Course Administrator** Helen Turpin ([h.turpin@leedsbeckett.ac.uk](mailto:h.turpin@leedsbeckett.ac.uk))

## Professional Accreditation or Recognition Associated with the Course

**Professional Body** British Computer Society (BCS) – The Chartered Institute for IT  
National Cyber Security Centre (NCSC)

## Accreditation/ Recognition Summary

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

The course has accreditation with the National Cyber Security Centre (NCSC), this will be accredited when the graduate has exited the award.

## Course Overview:

This course aims to develop students to be able to implement Cyber Security mechanisms into any business they obtain employment with, including entering the Cyber Security profession. The course is intended for students who already have an IT background, from either a professional or academic route. It is not intended to be a course for experienced practitioners or students in Cyber Security.

Cyber security plays an important role in enabling the protection and trust required for business and society to effectively operate. Organisations and individuals increasingly depend on information and communications technology (ICT) infrastructure, which frequently processes and stores large amounts of sensitive data. Consequently, there is significant security risk involved, and ICT systems need to be defended against many types of malicious attack. Every new ICT solution or system has

the potential to introduce vulnerabilities, and be misused by attackers. Therefore, organisations require security expertise to assess, design, deploy, and maintain security solutions.

The course has obtained recognition through accreditation with both the National Cyber Security Centre (NCSC) and the British Computer Society (BCS) – the Chartered Institute for IT.

#### The Course aims

- To provide opportunities for graduates with an honours degrees in computing (or equivalent qualifications) to pursue advanced study in the field of Cyber Security and develop general skills appropriate to the holder of a Masters level award.
- To produce individuals who have a critical and balanced appreciation of the practical and theoretical issues associated with Cyber Security.
- To develop individuals who are equipped with the skills and knowledge to devise, develop, manage, and implement Cyber Security methodologies.
- To provide a forum for the exchange and critical analysis of information relating to the field of Cyber Security, thereby developing the experience and skills of the students themselves and contributing to the body of knowledge in relation to the cognate area of Cyber Security.

#### **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 of Cyber Security methods and justify these based on ethical and legal requirements.
2	Demonstrate a critical analysis of current issues and new technologies within the field of Cyber Security.
3	Demonstrate originality in the application of knowledge and techniques to create and interpret knowledge in the area of Cyber Security.
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 and Your Modules**

##### **Summary**

A distance learning course is different in nature to a traditional face-to-face delivery. Whilst traditional lectures will not be utilised, short lectures are recorded and used to cover relevant material. Lab and support documents will be provided with clear guidance, screen shots, and audio where possible to ensure students comprehension.

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 course. The course is structured to develop the students understanding of key concepts of theory and practical processes. The building of this knowledge and feedback for assessments undertaken by students allows 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 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. Teaching and learning activities will include the use of simulations, case studies, projects, practical work, work based learning, and self-lead learning.

The learning and teaching methods used are identified in the descriptor for each of the modules. 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.

Please note that all taught modules will be studied prior to the final dissertation year. Depending on your entry point in the academic year, your modules may come in a different order than below. The order of study does not have any impact on progression or understanding for following modules.

	<b>Year 1</b>	<b>Core (Y/N)</b>	<b>Year 2</b>	<b>Core (Y/N)</b>
<b>Term 1</b>	Ethical Hacking and Penetration Testing L7	Y	Incident Response and Investigation L7	Y
<b>Term 2</b>	Web and Network Security L7	Y	Systems Security L7	Y
<b>Term 3</b>	Cyber Security Landscapes L7	Y	Research Practice	Y
	<b>Year 3</b>		<b>Core (Y/N)</b>	
<b>Term 1, 2, 3</b>	Dissertation		Y	

The option modules listed are indicative of a typical year. There may be some variance in the availability of option modules.

### **Assessment Balance and Scheduled Learning and Teaching Activities by Level**

The assessment balance and overall workload associated with this course are calculated from the core modules undertaken by a typical student. They have been reviewed and confirmed as representative by the Course Director.

A standard module equates to 200 notional learning hours, which may be comprised of teaching, learning and assessment, placement activities and independent study. Sandwich placement years spent out of the University are not included in the calculation unless they are credit bearing and attributed to a level of the course. Modules may have more than 1 component of assessment.

### **Workload**

<b>Overall Workload</b>	<b>Level 7</b>
Teaching, Learning and Assessment	988 hours
Independent Study	812 hours
Placement	-

### **Learning Support Arrangements**

If you have a question or a problem relating to your course, your Course Administrator is there to help you. Course Administrators work closely with academic staff and can make referrals to teaching staff or to specialist professional services as appropriate. They can give you a confirmation of attendance letter, and a transcript. You may also like to contact your Course Rep or the Students' Union Advice team for additional support with course-related questions.

If you have any questions about life at our University in general, call into or contact the Student Hub on either campus to speak to our Student Experience Team. This team, consisting of recent graduates and permanent staff, are available to support you throughout your time here. They will make sure you have access to and are aware of the support, specialist services, and opportunities our University provides. There is a Student Hub on the ground floor of the Rose Bowl at City Campus

and one in Campus Central at Headingley. You can also find the team in the Gateway in the Leslie Silver Building at City Campus. Email enquiries may be directed to [studentexperience@leedsbeckett.ac.uk](mailto:studentexperience@leedsbeckett.ac.uk).

Within MyBeckett you will see two tabs (Support and Opportunities) where you can find online information and resources for yourselves. The Support tab gives you access to details of services available to give you academic and personal support. These include Library Services, the Students' Union, Money advice, Disability advice and support, Wellbeing, 10 International Student Services and Accommodation. There is also an A-Z of Support Services, and access to online appointments/registration.

The Opportunities tab is the place to explore the options you have for jobs, work placements, volunteering, and a wide range of other opportunities. For example, you can find out here how to get help with your CV, prepare for an interview, get a part-time job or voluntary role, take part in an international project, or join societies closer to home.