MSc Computer Science (conversion)

Full-Time / Part-Time Study from October 2023

Programme Demands Document

15th March 2023

Introduction

This document is produced by The University of Law (the University) to provide information about the demands of the course for prospective students. Detailed questions about the extent of adjustments which may be made for students with support requirements should be addressed to the Disability Support and Inclusion Service. This document may be made available to medical practitioners who may be asked to provide a professional judgement on the ability of an applicant to complete the course.

The information included is an indicative guide for the [full-time / part-time / online] course commencing in [enter start date]. Students who enrol on the course will be subject to the course regulations in force at that time.

Details of the course/s including subject coverage and the learning environment, can be found on the University's website.

This document covers the requirements of the course/s.

Support for Students

University of Law Inclusion Plans (ULIPs)

The University has a dedicated Disability Support and Inclusion Service to assist students in accessing the programme. We encourage students to share information about disabilities and health conditions with the University as early as possible and preferably prior to starting the course so that adjustments can be put in place as early as possible. Medical and / or diagnostic evidence should be provided along with confirmation of any Disabled Students' Allowance (DSA) funding. Upon receipt of this information the Disability Support and Inclusion Service will create a University of Law Inclusion Plan which will detail any course and exam / assessment adjustments. These are then communicated to campus-based Disability Liaison Officers, tutors and assessment offices to implement the adjustments.

The University is able to provide diagnostic assessments with an Educational Psychologist for students suspecting a Specific Learning Difference (SpLD) for example: Dyslexia, Dyspraxia, and Dyscalculia. The student will incur a small contribution fee of £75. Once completed the Disability Support and Inclusion Service can put in place a University of Law Inclusion Plan detailing the relevant adjustments to the course and assessments.

The Disability Support and Inclusion Service can advise you on how to obtain DSA, we recommend you apply as soon as possible. If you are eligible you can apply for Disabled Student's Allowance https://www.gov.uk/disabled-students-allowances-dsas.

For more information please visit our disability micro-site
http://www.law.ac.uk/disabilitysupport-service/ or contact disabilitysupportservice@law.ac.uk

Study Skills Support

All students can access the Macmillan Skills4Study online resources via our interactive virtual learning environment, ELITE. Students can also access webinars and workshop sessions and individual one to one sessions with our Study Skills Advisors. For further information contact studyskills-[your campus]@law.ac.uk (for example, studyskills-bloomsbury@law.ac.uk for Bloomsbury students)

Digital skills support for non-computing graduates

We understand that when you join the course you may have limited experience and knowledge of computing as a discipline. In order to ensure that you are able to engage successfully with the materials and cope with the computing/digital skills aspects of the course we will be providing comprehensive support throughout your induction and also provide additional supporting materials as part of the Prepare and Consolidate tasks as part of the modules.

Induction

During induction we will run a digital skills bootcamp. This will introduce some of the core computing and digital skills concepts that form part of the course. These sessions will be tutor led and form part of the induction activities. The bootcamp will take place during the early morning and afternoon/early evening aspects of induction. All materials and sessions will be live streamed, but will also be recorded so that they can be re-visited at any time, and also to allow those who may have missed a session(s) to be able to view material and bring themselves up-to-speed (tutors will also be on hand to answer questions as needed). A timetable of the bootcamp sessions, which also outlines the general induction activities as part of the introduction to the programme, will be provided as part of the pre-arrival information.

We are aware that some students may arrive late, and therefore all bootcamp sessions will be recorded and available to all students. Where a student requires further support, either due to late arrival or simply due to needing a more detailed explanation, this will be available throughout the duration of the course via support sessions and additional asynchronous material.

On-programme support

When you enter the modules there will be a series of Preparatory tasks for each session, including practical sessions. These will be problem sheets and self-help sheets alongside a series of HowTo guides. These will be supplemented by Consolidate sessions which will again provide help and support to develop your skills. We will also provide office hours and technical

support to ensure that everyone is able to succeed and really enjoys the programme!

Modes of Study

Study Locations

Programme	Birmingham	Bristol	Chester	Exeter	Guilford	Leeds	Liverpool	London Bloomsbury	London Moorgate	Manchester	Newcastle	Norwich	Nottingham	Reading	Sheffield	Online
Computer Science								✓								

We have liaised with the Timetabled team and developed initial year planners for 2023/24 starts. As the programme involves shared modules, MSc Computer Science (conversion) students will be in attendance for those shared modules on the same days at the 'owning' department.

The Computer Science specialist modules have been slotted in to the timetable to ensure that there is a balance between ensuring students have sufficient time and space for independent space and development, and ensuring that the timetable makes maximum use of available space. Students will be expected to attend campus 2-3 days per week (or the equivalent online, if studying in that mode – note that online is only applicable to non-International students).

You will be provided with a copy of your timetable before you join the course and the sessions specified for workshops and practical sessions apply to every week during a particular term. Only in exceptional circumstances (e.g. staff illness) would there need to be a change to the published timetable. Any changes will be minimized, and notification of changes will be sent out via email in good time.

Summary of Key Learning Outcomes

Knowledge and Understanding

- Demonstrate a fundamental understanding of the knowledge and theory underpinning software development and artificial intelligence
- Critically assess the requirements of a given scenario and choose appropriate tools or methods to solve the given problem
- Critically evaluate and justify the most appropriate tool/method to provide a solution to a real-world problem
- Utilise a systematic understanding of computing and a critical understanding of new insights and applications to a range of relevant subjects
- Exploit a range of appropriate research methods in order to underpin the necessary knowledge needed to develop sustainable and economically viable solutions.

Cognitive Skills

- Deal with partial information (relating to a given scenario) and identify an appropriately robust solution to complex and challenging problems
- Deal with uncertainty and overcome challenging situations in order to arrive at a viable solution to a range of problems, some of which are challenging
- Analyse and evaluate a range of computing concepts, and select, apply and justify their use to solve a given problem.

Practical skills

- Design, develop and test digital solutions to given, and sometimes complex, problems
- Specify the requirements for a digital solution and create an associated design given the specified requirements

Transferable skills

- Undertake self-directed approaches and work to achieve solutions with limited guidance
- Effectively organise work in order to meet deadlines and provide robust and well explained decisions for the choices made
- Work effectively in group situations, demonstrating compassion, understanding and decisiveness where required
- Exercise initiative and take responsibility in order to ensure that an effective contribution is made to solving a given problem
- Work independently, using initiative, in order to establish a method for continuing learning and development
- Communicate choices, judgements and recommendations to a range of specialist and non-specialist audiences.

Preliminary Knowledge

No specialist knowledge is assumed for the MSc conversion programme. It would be useful, but not mandatory, to have a basic working knowledge of standard applications such as Microsoft word, Microsoft Excel and Microsoft PowerPoint, or equivalent.

Pre-Course Demands

None

Learning Environment

You will learn in a specialist lab facility (practical sessions) where you will learn to use various hardware devices and a range of software tools.

Workshops will be delivered in purpose built workshop spaces and will involve the discussion and exploration of topics. Ahead of each workshop you will be provided with the necessary workshop slides and reading which we will expect you to complete before attending your workshop.

We encourage you also to make use of the specialist lab facilities outside of your core teaching hours, and all of our software is available virtually via the Cloud, so you can also practice, complete your coursework etc. in the comfort of your own living space.

Finally, we want to develop your employability skills to ensure that you can secure a highly-skilled job when you graduate. With this is mind we have set up a student computing society with guest workshops, will offer a range of hackathons and hands-on activities and opportunities for interview practice, experience of real-world industry briefs etc.

Here at the University of Law we made use of a Prepare, Engage and Consolidate (PEC) model of learning. This means that different aspects of your learning (e.g. pre-reading, workshops and assessment) will fall into one of these categories. The approach for your programme is shown below:

Prepare

The activities undertaken in the prepare stage (each week) will involve pre-reading of content, e.g. a book chapter, a research article and may also involve some quizzes to ensure that you have understood what you have learned. Each module will have prepare activities available for you and accessible via the Elite Learning platform. For each module you will typically have two hours of preparation activities each week.

Engage

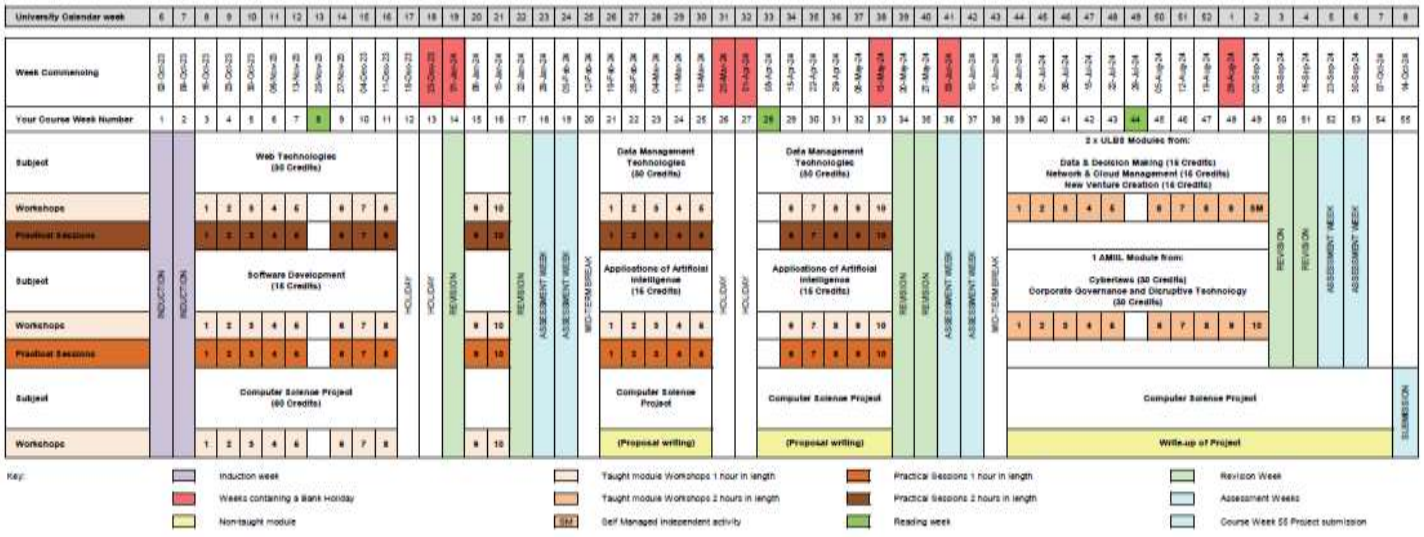
The engage activities involve the weekly workshops and practical lab sessions. In these we will discuss key topics and explore your views, ideas and engagement with the materials that formed part of the prepare stage. Typically, each week you will have two one-hour workshops per module, and a two hour practical lab (so four hours in total). This will allow us to explore, debate and challenge what you have read and put your knowledge and understanding into practice. There will be plenty of opportunities to actively participate, and we will use various learning technology (e.g. Kahoot) in order to collect feedback and assess whether any particular areas require further development.

Consolidate

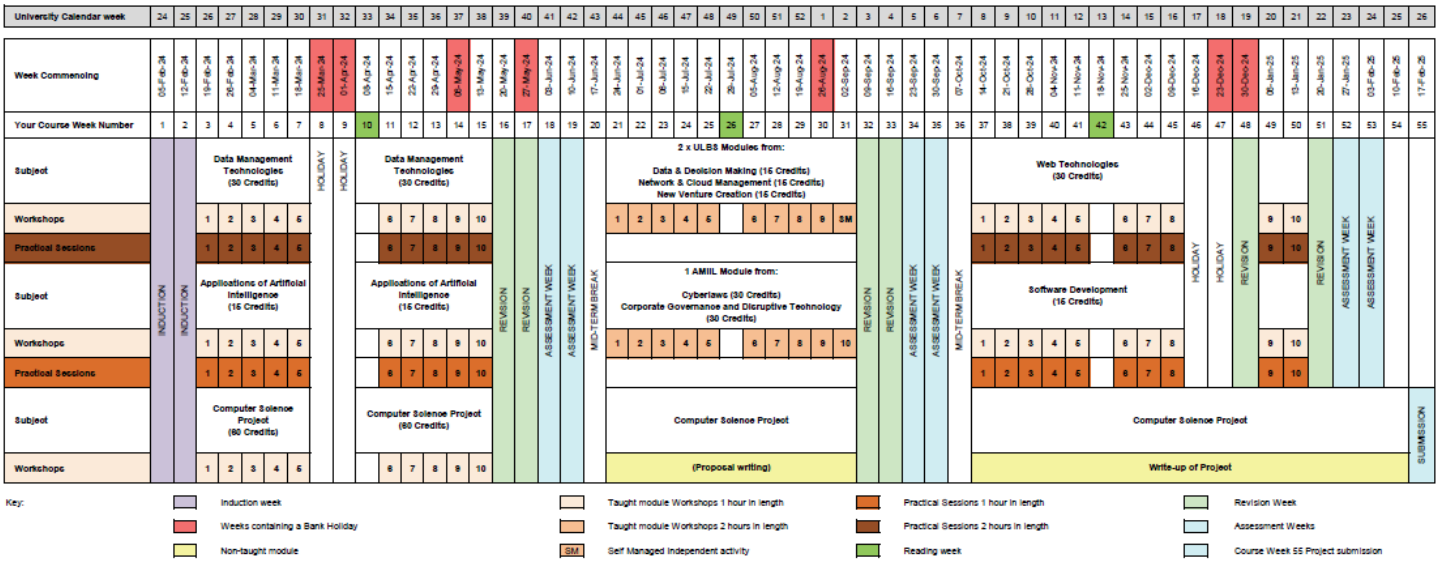
The consolidate activities will follow on from the prepare and engage (P&E) weekly activities. These will often take the form of a short online quiz or problem sheet which will provide us (the teaching staff) with an opportunity to provide feedback. These will be so-called formative tasks – they will not contribute to the final overall mark, but they will prove really helpful in your development. The quizzes and/or problem sheets will typically each require 30 minutes to complete and there will be a maximum of two tasks (and usually only one) per module.

Attendance requirements

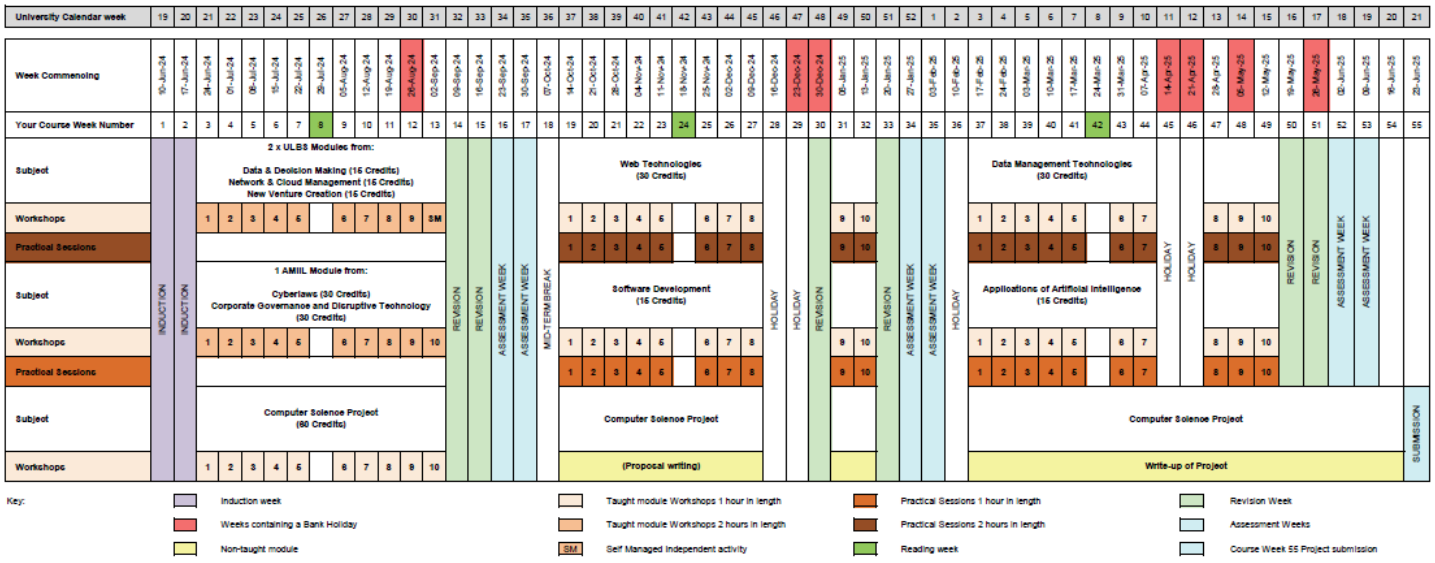
You will be expected to attend campus two to three days a week, and the typical weekly planner by semester is shown below:



Autumn Term



Winter Term



Spring Term

Assessment Demands

A summary of the assessment schedule for this programme is explained below.

If appropriate medical evidence is accepted (a minimum of four weeks prior to the start of any assessment period), we may be able to provide adjustments for assessments including re-scheduling assessments in the programme to avoid more than one on any one day. As part of the

University's commitment to an inclusive learning environment, we anticipate the needs of our students and design the coursework tasks to have sufficient time for most students, this includes students with SpLDs. A SpLD is generally not considered a sole justification for granting coursework extensions and coursework extensions are only granted in exceptional, evidenced circumstances.

The University operates a fit to sit policy, which means that students who attend an assessment are deeming themselves to be fit to sit that assessment. It is therefore not possible to submit a concession application for impaired performance for an assessment that has been sat, unless there was a procedural defect in the conduct of the assessment.

Assessment and learning adjustments

If you have any queries regarding support or adjustments whilst studying at the University of Law please contact the Disability Support and Inclusion Service on disabilitysupportservice@law.ac.uk or 01483216657

Time limits for Completion

This course should be completed within twelve months (if studying full-time) or two years (if studying part-time)

Summary of Assessment Demands

The course is assessed using a variety of methods including:

- Portfolios
- Coursework
- Examinations
- Presentations
- Blogs/Vlogs

For each module you study, approximately 20-30% of the notional learning hours (for every 1 credit there are 10 notional learning hours, so for a 15 credit module there are 150 notional learning hours, and for a 30 credit module there are 300 notional learning hours) is spent engaging with and completing your assessment.

Typically, each module will have either one or two assessments associated with it. The main concept behind the assessments are to be able to assess your knowledge, understanding, practical and analytical skills in relation to the subject matter.

Any examinations (formal written examinations) will be of three hours duration, and multiple choice tests/in-class test will typically have a duration of 60-90 minutes.

Formal assessments (summative)

Module	Assessment		
Core modules			
Web Technologies	Coursework portfolio	Coursework portfolio	
	2500 words (60%)	2000 words (40%)	
Data Management Technologies	Portfolio	Portfolio	
	40% (2000 words)	60% (2500 words)	
MSc Project in Computer Science	Research proposal and project report	Project deliverable	Oral presentation
	750 words and 10,000 words, respectively (40%)	50%	10%
Optional modules			
Software Development	Coursework – portfolio	Coursework – portfolio of tasks	
	1000 words (40%)	1250 words (60%)	
Applications of Artificial Intelligence	Coursework portfolio		
	2250 words (1500 words for main portfolio plus up to 750 words for evidential appendices) 100%		
Cyber management and Compliance	Coursework portfolio		
	100%		
Cybersecurity for Business	Coursework portfolio		
	100%		
Data Design Management	Individual presentation/poster		
	100%		
Data Analysis for Business	Coursework report		
	2500 words (100%)		
Data Visualization	Coursework portfolio		
	100%		
Social Enterprise	Individual presentation/poster		
	650 words (100%)		
Artificial Intelligence and Blockchain in Law	Coursework essay		
	4500 words (100%)		
Cyberlaws	Formal written examination		
	3 hours (100%)		

The Internet of Things	Formal written examination
	3 hours (100%)
Corporate Governance and Disruptive Technology	Coursework report
	5000 words (100%)
Data Protection and Intellectual Property	Coursework report
	4500 words (100%)
Data and Decision Making	Coursework report
	2500 words (100%)
Network and Cloud Management	Individual Portfolio
	2500 words (100%)
New Venture Creation	Individual written report
	2500 words (100%)
Data Security	Individual Portfolio
	2500 words (100%)

Roll-out of optional modules

In order to reduce the complexity associated with optional module choice, and to ensure smooth running in the first year of operation we are limiting the choice of business optional modules to the following: Data and Decision making; Network and Cloud Management and New Venture Creation.

We are also aligning to when the optional modules will run both within Law and Business meaning that some options may not be available within a particular academic year. All advertising and student-facing information will make clear which options are available for which intake in any given academic year. This may mean that some of the modules within the programme specification may not be available for you to choose. However, you will receive advice and support during the initial stages of your on-boarding to make clear which choices are available and to provide guidance on the choices you may wish to make.

Digital and technological resources and requirements

Introduction

For general computer hardware, students are recommended to have access to a computer which can access the latest browsers (see below). This will enable them to access wider institutional software, including Microsoft OneDrive, Blackboard Collaborate Conferencing System, Panopto Multimedia Player and the Library Systems. The computer (laptop or desktop) should be multimedia enabled with a webcam. Students are also recommended to have a headset with built-in microphone.

What is an illustrated (Minimum) specification?

Operating System

- Windows 10, macOS 10.13+

Processor

- Intel i3/AMD

RAM

- 8GB

Storage

- 256GB

Camera

- Minimum 640 x 360 resolution

Microphone

- Separate headphone set

Internet enabled

- Wifi 2.4GHz or 5GHz

Browsers

- Google Chrome Firefox Safari Microsoft Edge

Internet access

The learning model will require you to collaborate and interact online. Therefore, if you are using a laptop we would recommend that you are able to connect this to your Internet Router and use an Ethernet cable.

Digital skills development – LinkedIn Learning and the Skills Academy

As part of your course you will also be provided with access to the LinkedIn Learning platform which will allow you to develop and enhance your chosen digital skills and be able to link this to a LinkedIn profile that will allow you to demonstrate you practical skills to potential employers.

As well as this you will also be able to access the Skills Academy as part of your course which is accessible via the Elite Virtual Learning Environment (the same platform that you use to access your module information). This providers further opportunity to develop your professional skills and ensure that you are job ready upon graduation.

Community of practice

As part of our commitment to you we have established a community of practice in which we would like you to actively take part. Learning is about supporting one another, and through supporting peers and having an opportunity to engage with industry experts through guest presentations and real-world assessment briefs you will have the chance to take control of your learning whilst also being able to benefit from, as well as contribute to, the support that is offered. Information on the community of practice is available on Elite and is signposted through your module sites on Elite.

What software will I likely use at the University of Law?

At the University of Law we use a number of core learning technologies within our learning, teaching and assessment models. The following lists key systems with links to their required technologies:

Blackboard Learn Ultra

- https://help.blackboard.com/Learn/Student/Ultra/Getting_Started/Browser_Support

Blackboard Collaborate Ultra

- https://help.blackboard.com/Collaborate/Ultra/Participant/Get_Started/Browser_Support

Respondus

- https://web.respondus.com/he/lockdownbrowser/resources/

Panopto

- https://support.panopto.com/s/article/Learn-About-Viewing-Requirements

ProctorU

- https://www.proctoru.com/proctoru-google-resouce-center

Can I use a Chromebook?

Currently, we do not recommend a Chromebook as these are not fully supported by all our Digital Assessment platforms.

Specialist software access and support

As specialist software and support is an integrated part of your learning we have put in place a series of digital guides to accompany your module learning (available as part of the introduction to the unit on Elite) as well as providing access to a specialist technician and academic staff (available both onsite and virtually through MS Teams) in order to help and support you during the programme. During the initial practical sessions for each module we will go through the necessary set-up and

ensure that you have access to this setup irrespective of whether you are on or off-campus through the utilization of an Microsoft Azure platform that can be easily accessed an utilized through a web browser such as Mozilla Firefox, Google Chrome or Microsoft Edge.

Typing

To be able to effectively sit online assessments, it is expected that students have a typing speed of 30-40 words per minute, the average typing speed for adults. This will enable them to successfully complete the assessments within the given timeframe. If students are unsure as to the speed of their typing, they may wish to self-assess their typing speed by using the following online tool:

https://10fastfingers.com/typing-test/english

It is recommended that an external Bluetooth or wired keyboard should be utilised, as this provides a better typing position. Students may also wish to investigate the use of ergonomic keyboards, if required.

During your time on the course you will have access to virtual lab resources on Microsoft Azure – these will be accessible both on- and off-campus and will run through a web-browser so there will be no requirement for you to install any specialist software yourself (unless you wish to do so!). A full induction to the labs will take place during the induction week, and will also be re-enforced during the first four weeks of your module. Academic and support staff will also be on hand to provide technical guidance during practical sessions, and you will also be able to visit your lecturer during office hours to ask any questions, including technical issues, each week.