

# **Course Specification**

Cou	Course Summary Information			
1	Course Title		BSc (Hons) Computing (Top-up)	
2	BCU Course	UCAS Code	US0947	1015
	Code			
3	Awarding Institution		Birmingham City University	
4	Teaching Institution(s)			
	(if different from point 3)			
5	Professional Statutory or			
	Regulatory Body (PSRB)			
	accreditation (if applicable)			

## 6 Course Description

The BSc (Hons) Computing undergraduate course combines research and theory with application and development, enabling you to put your learning into innovative practice. You'll focus on research-informed, technical aspects of computing, as well as developing a wider appreciation of how computer systems can be applied in industry.

In an environment where businesses are regularly confronted with the need to evolve, you will develop a strategic mind-set of addressing global challenges, businesses requirements and societal needs via digital infrastructure. Preparing you for industry, you'll learn a broad range of computing and information technology analytical skills that are needed to design, develop, operate and maintain systems. The innovation-driven curriculum will also ensure you are able to innovate in order deliver business value and sustainable solutions.

The computing degree top-up course not only prepares you for the current state of industry, but equips you with the skills adapt, thrive and lead in the future. We provide you with access to a wide range of technologies, media and resources, all of which develop your intellectual, technical, practical and professional skills in information and network security. You may also have the fantastic opportunity to gain certifications from Cisco, Juniper and Linux, during the course of your study.

You'll gain your skills by attending lectures, tutor-led seminars and participating in practical and independent learning activities. To help equip you for the workplace, tutors will help you to develop the ability to direct your own learning.

Lectures will introduce you to key themes, theories and concepts, which you'll explore further in your tutorials. You'll also have access to online resources, discussion forums, textbooks and journal articles, in order to ensure that you develop a critical understanding of work in the discipline. The module guides direct you to a full range of resources, including books and journals, as well as specialised course-based material.

## What's covered on the course?

The course offers you the opportunity to build, design and manage large data communications and information networks. The course also includes Microsoft and Linux (open source)



technologies that are being deployed in the IT infrastructure space and are critical component of cloud computing.

You will be exposed to Communication Networks - the engineering of technologies which enable data and voice to transmit over the internet; and you will address the Infrastructure Architecture by the development and optimisation of computing architectures to interface and enable systems operation. In Information Systems you will explore how to provide critical support for business processes, information security and business intelligence. Research and Innovative practice will advance you as an individual at each level, challenging you to acquire, practice and perform through project based modules.

The computing top-up course places technologies in the context of developing integrated business solutions. An effective IT professional needs to be aware of wider business issues. You will develop an understanding of the professional responsibilities of IT staff and the skills required of managers, leaders and consultants. The impact of globalisation will be considered.

### **Potential Future Careers**

As a graduate you will be versatile, adaptable, technically literate, and well equipped to perform a variety of roles within the computing industry that include Network engineer, system analyst, IT administrator, application developer, IT solutions analyst, systems analyst, applications support analyst, technical support engineer, business IT consultant, IT security consultant and project architect. The course also provides a foundation for further study at master's level which is encouraged for a career in a research, innovation and enterprise roles in the industry.

7	Course Awards		
7a	Name of Final Award	Level	Credits
			Awarded
	Bachelor of Science with Honours Computing	6	120
7b	Exit Awards and Credits Awarded		
	Not applicable		

8	Derogation from the University Regulations		
	Not applicable		

9	Delivery Patterns			
Mode	Mode(s) of Study Location Duration of Study Code			
Full Ti	me	City Centre	1 year	US0947



# 10 Entry Requirements

The admission requirements for this course are stated on the course page of the BCU website at <a href="https://www.bcu.ac.uk/">https://www.bcu.ac.uk/</a> or may be found by searching for the course entry profile located on the UCAS website.

11	Course Learning Outcomes		
<u> </u>	Knowledge & Understanding		
1	Draw on a range of existing and emergent technologies and approaches in the development and justification of innovative computing and information technology solutions.		
2	Explore theory and practice of communication networks, infrastructure services and information systems and security and their applications in business.		
3	Relate the management, organisational, planning and business theories and techniques and their application in the Computing industry.		
4	Demonstrate knowledge and understanding of relevant international regulatory and standards bodies and legislation relevant to computing.		
	Cognitive & Intellectual Skills		
5	Assimilate, interpret and analyse information to construct effective arguments and express valid conclusions.		
6	Create solutions that integrate technical knowledge and design principles for software and hardware applications.		
7	Apply appropriate management and organisational techniques to planning and implementing information technology and security solutions.		
8	Make judgments about the merits of different viewpoints and perspectives on commercial, economic, legal, ethical and social issues relevant to the computing industry.		
	Practical & Professional Skills		
9	Apply tools and techniques for the design, implementation, testing, troubleshooting and maintenance of computer software and hardware solutions.		
10	Design or adapt a system, component or process to meet desired needs.		
11	Demonstrate competence in management of research and innovation projects and the application of mathematical and engineering techniques, taking account of industrial, commercial and security constraints.		
12	Select relevant test and diagnostic techniques to analyse performance and ensure fitness for purpose.		
13	Collect relevant information, assimilate knowledge, marshal a coherent and rational argument, and relate theory and practice.		
14	Draw independent conclusions based on a rigorous, analytical and critical assessment of argument, opinion and data.		
	Key Transferable Skills		
15	Apply skills in research, independent study, career planning, self-management, including time management and prioritisation of tasks when tackling complex problems.		



16	Demonstrate effective communication skills in writing, orally, and in presentations to specialist and non-specialist audiences. Be able to justify their work in its specific details and within a broader context
17	Demonstrate team-spirit by cooperating with others, plan and implement tasks at a professional level and contribute to team goals through making sound judgments.
18	Develop confidence and a resilient approach to undertake a substantial piece of practical work without close supervision.



# 12 Course Requirements

## 12a Level 6:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
CMP6172	Consultancy and IT Management	20
CMP6173	Business Systems Solutions	20
CMP6175	IT Infrastructure	20
CMP6193	Information Security	20
CMP6200	Individual Honours Project	40
	,	

# 12b Structure Diagram

	Level 6			
А	Business Systems Solutions 20 Credits	IT Infrastructure 20 Credits	Individual Honours Project	
В	Consultancy and IT Management 20 Credits	Information Security 20 Credits	40 Credits	



### 13 Overall Student Workload and Balance of Assessment

Overall student *workload* consists of class contact hours, independent learning and assessment activity, with each credit taken equating to a total study time of around 10 hours. While actual contact hours may depend on the optional modules selected, the following information gives an indication of how much time students will need to allocate to different activities at each level of the course.

Scheduled Learning includes lectures, practical classes and workshops, contact time specified in timetable Directed Learning includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning

Private Study includes preparation for exams

The *balance of assessment* by mode of assessment (e.g. coursework, exam and in-person) depends to some extent on the optional modules chosen by students. The approximate percentage of the course assessed by coursework, exam and in-person is shown below.

### Level 6

## **Workload**

## 17% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	202
Directed Learning	252
Private Study	746
Total Hours	1200

## **Balance of Assessment**

Assessment Mode	Percentage
Coursework	98%
Exam	0%
In-Person	2%