OFFIC	OFFICE USE ONLY						
Date of validation event:	26 April 2018						
Date of approval by Academic Board:	28 November 2018						
Approved Validation Period:	5 years from September 2019						
Date and type of revision:	APSC approved standard part-time delivery routes 29/4/19. Sep 2020 APSC approved module replacement in MSc Computing and MSc Computer Science, COM741 replaced by COM744 17/03/20 22 July 2020 Validation of MSc Data Science and Big Data Analytics, panel approved module replacement in MSc Computing and MSc Computer Science, COM701 replaced by COM713						

PART TWO PROGRAMME SPECIFICATON

MSc Computer Science

MSc Computing

MSc Computer Networking

MSc Cyber Security

1 Awarding body

Glyndŵr University

2 Programme delivered by

Glyndŵr University

3 Location of delivery

Plas Coch Campus, Wrexham Independent Science and Technology (IST) College-MSc Computing Londontec City Campus-MSc Computing

4 Faculty / Department

Faculty of Arts, Science and Technology / Computing

5 Exit awards available

Pg Dip Computer Science

Pg Dip Computing

Pg Dip Computer Networking

Pg Dip Cyber Security

Pg Cert Computing

6 Professional, Statutory or Regulatory Body (PSRB) accreditation

The programme has been designed to align with the requirements of the British Computer Society (BCS) and accreditation will be requested post approval.

The information above is correct at the point of programme validation, refer to university PSRB register and university website for current details of

programme accreditation.

7 Accreditation available

See above.

Please add details of any conditions that may affect accreditation (e.g. is it dependent on choices made by a student?)

Students must have studied all years at the Wrexham Glyndŵr University campus.

9 JACS3 code

MSc Computer Science: I100

MSc Computing: I100

MSc Computer Networking: I120 MSc Cyber Security: I190

10 UCAS code

N/A

11 Relevant QAA subject benchmark statement/s

Computing (2016)

Master's degrees in computing (2011) Master's degree characteristics (2015)

Other external and internal reference points used to inform the programme outcomes

BCS: Additional requirements for CITP

BCS: Additional requirements for CEng/CSci

13 Mode of study

Full & part time

14 Normal length of study

Full-time: 1 year Part-time: 2 years

16 Language of study

English

17 Criteria for admission to the programme

Standard entry criteria

Entry requirements are in accordance with the University's admissions policy https://www.glyndwr.ac.uk/en/media/FINAL%20ADMISSIONS%20POLICY%2020 17.pdf

The University's entry requirements are set out at

http://www.glyndwr.ac.uk/en/Undergraduatecourses/UCAStariffchange2017/

International entry qualifications are outlined on the <u>National Academic</u> <u>Recognition and Information Centre (NARIC)</u> as equivalent to the relevant UK entry qualification.

In addition to the academic entry requirements, all applicants whose first language is not English or Welsh must demonstrate English language proficiency.

European students are able to provide this evidence in a number of ways (please see http://www.glyndwr.ac.uk/en/Europeanstudents/entryrequirements/ for details), including IELTS.

International students require a UKVI Approved Secure English Language Test (SELT) (please see

http://www.glyndwr.ac.uk/en/Internationalstudents/EntryandEnglishLanguageRequirements/ for details).

DBS Requirements

N/A

Non-standard entry criteria and programme specific requirements

N/A

18 Recognition of Prior (Experiential) Learning

Applicants may enter the programme at various levels with Recognition of Prior Learning (RPL) or Recognition of Prior Experiential learning (RPEL) in accordance with the <u>University General Regulations</u>. Any programme specific restrictions are outlined below

Programme specific restrictions

N/A

19 Aims of the programme

These programmes aim to provide a platform for more advanced studies, acquisition of higher-level skills and knowledge, increased employability, and professionalism. The intention of our master's level suite of programmes is to build upon the experiences and achievements of our students and take them to the next level of personal development.

The suite of programmes has overarching aims, which will provide students with:

- A deepened and specialist knowledge in a specific field of computing;
- Higher-level technical and professional skills;
- Awareness of emerging trends and technologies in their specialist field;
- The ability to critically appraise and disseminate research results;
- A sound basis for further research and/or professional development.

At programme specific level, the additional aims are:

MSc Computer Science

 To provide specialist, advanced technical skills in the areas of networking, web and mobile development and software development.

MSc Computing

 To provide a rapid introduction to the field of computing at master's level for students who have had limited experience in the subject discipline, producing competent and energised graduates.

MSc Computer Networking

• To provide a systematic understanding and critical awareness of network structure and data communications principles, current technologies, existing and emerging technological difficulties and new technological insights.

MSc Cyber Security

 To provide a deep and specialist set of knowledge and high-level practical abilities in the field of cyber security, incorporating techniques for the development and analysis of secure systems and technology platforms.

20 Distinctive features of the programme

MSc Computer Science

The MSc in Computer Science focuses on the practical science of computer programming with a commercial slant, the development of applications for up to date mobile devices as well as the concepts in data communications. In addition, the programme seeks to develop advanced software development and programming skills and expertise, making graduates ready for challenging and high-paced software development employment. Although the necessary background is introduced as appropriate, the course deals with problem solving and the provisioning of real computer based services and applications using current and emerging technologies. In addition to developing an understanding of underlying principles, students are engaged in the practical application of programme design, modern web technologies, network design, implementation, trouble-shooting and management for real- world problems. The practicalities of troubleshooting applications are embedded deeply within the programme.

MSc Computing

This programme is primarily designed to provide an opportunity for postgraduate study for those whose first degree is not in computing or for those whose degree in Computing was awarded some years ago. Graduates with some previous industrial experience in the computer field can also broaden their horizons through this MSc programme, by gaining a sound knowledge of the theoretical basis and practical applications of computing. Students exiting the programme are equipped with knowledge of theoretical, academic, evaluative, and vocational expertise. Students will develop their critical thinking skills and their ability to have the foresight to deal with the increasingly challenging and changing nature of the field. The programme is designed to provide the skills to meet industrial and commercial needs, and enable students to practice as computing and IT professionals.

MSc Computer Networking

The MSc in Computer Networking focuses on practical networking rather than abstract concepts in data communications. Although the necessary background is introduced as appropriate, the course on the whole deals with problem solving and the provisioning of real network services using current and emergent network hardware and protocols along with the development of applications to exploit these technologies. In addition to developing an understanding of underlying principles, students are engaged in the practical application of network design, implementation, trouble-shooting and management for real-world problems. The practicalities of network troubleshooting are embedded deeply. At all stages of the programme, appropriate reflection on their progress and development will be a requirement of progress. For their dissertations/theses, students will be expected to investigate cutting-edge technologies, implement and test novel networking solutions or develop or analyse original network applications.

MSc Cyber Security

The MSc Cyber Security is designed to build upon substantial knowledge that has already been gained at undergraduate level, or from more recent industry work, in the field of computer security, cyber security, network security, and related fields. This programme focuses upon several specialist disciplines, which are technical in nature, particularly around the areas of developing secure software platforms and protecting against complex attack processes used to breach system security and create deficits in normal functionality. The programme also integrates professional level skills that relate to the audit and management or institutional and organizational risk relating to cyber security and data protection regulations. This is achieved via a mixture of interactive theory work as well as deep technical and practical teaching and exercises

In terms of all of the MSc programmes on offer, it is anticipated that graduates will go into careers in the computing and technology fields of their chosen award specialism or to continue their academic study at doctoral (MPhil/PhD) level, and industrial research positions, as well as new roles that are likely to emerge in the industry.

21 Programme structure narrative

All of the MSc programmes included in this suite feature a core backbone of modules, making up 100 credits of the 180 credit programme. This core consists of Postgraduate Study and Research Methods, Technological Horizon-Scanning, and Dissertation.

The programme consists of two parts: part one, which consists of the 120 credits of taught modules; and part two, which is the 60 credit Dissertation. The Dissertation pursued will complement the prior taught modules by focussing upon a theme or topic from the relevant computing discipline.

The module diet of each programme provides a vehicle for these aims and intentions to be met and will equip students with a mixture of theoretical and practical abilities that will allow them to enhance their current skillset in this emerging field. In addition to the specialist content, students will develop transferable skills in working consistently at a professional level and in handling, and responding to, complex, large-scale, information, focused upon current research and industry developments in computing.

The programme is offered in full-time and part-time modes of attendance. Students will typically be expected to attend the University for two or three days a week, full-time, and for one or two days a week, when studying part-time, in addition to studying in their own time.

22 Programme structure diagram

MSc Computer Science (Full-time)

	Level 7					
_	Mod title	Postgraduate Study and Research Methods	Mod title	Network Hardware and Software	Mod title	Advanced Data Structures and Algorithms
Semester	Mod code/ 'New' Module	COM742	Mod code/ 'New' Module	COM739	Mod code/ 'New' Module	COM713
em	Credit value	20	Credit value	20	Credit value	20
S	Core/Option	Core	Core/Option	Core	Core/Option	Core
	Mod leader	Vic Grout	Mod leader	Nigel Houlden	Mod leader	Jessica Muirhead

		Internet and		Security and		Technological
	Mod title	Mobile App	Mod title	Risk	Mod title	Horizon-
		Development		Management		Scanning
ster 2	Mod code/	COM708	Mod code/	COM744	Mod code/	COM745
	'New' Module	COIVI700	'New' Module	CONT44	'New' Module	OOW1743
nes	Credit value	20	Credit value	20	Credit value	20
Semester	Core/Option	Core	Core/Option	Core	Core/Option	Core
	Mod leader	Jason Matthews	Mod leader	Denise Oram	Mod leader	Vic Grout

ter 3	Mod title	Dissertation
	Mod code/ 'New' Module	COM738
Semester	Credit value	60
en	Core/Option	Core
0)	Mod leader	Rich Picking

MSc Computing (Full-time)

	Level 7					
	Mod title	Postgraduate Study and Research Methods	Mod title	Network Hardware and Software	Mod title	Advanced Data Structures and Algorithms
Semester 1	Mod code/ 'New' Module	COM742	Mod code/ 'New' Module	COM739	Mod code/ 'New' Module	COM713
l iii	Credit value	20	Credit value	20	Credit value	20
Š	Core/Option	Core	Core/Option	Core	Core/Option	Core
	Mod leader	Vic Grout	Mod leader	Nigel Houlden	Mod leader	Jessica Muirhead

		Database		Security and		Technological
	Mod title	Systems and	Mod title	Risk	Mod title	Horizon-
2		Analytics		Management		Scanning
	Mod code/	COM736	Mod code/	COM744	Mod code/	COM745
este	'New' Module	COIVI730	'New' Module	CONT44	'New' Module	COIVI743
Semester	Credit value	20	Credit value	20	Credit value	20
Š	Core/Option	Core	Core/Option	Core	Core/Option	Core
	Mod leader	Bindu Jose	Mod leader	Denise Oram	Mod leader	Vic Grout

er 3	Mod title	Dissertation
	Mod code/ 'New' Module	COM738
Semester	Credit value	60
èer	Core/Option	Core
(0)	Mod leader	Rich Picking

MSc Computer Networking (Full-time)

	Level 7					
_	Mod title	Postgraduate Study and Research Methods	Mod title	Network Hardware and Software	Mod title	Network Techniques & Technologies
Semester '	Mod code/ 'New' Module	COM742	Mod code/ 'New' Module	COM739	Mod code/ 'New' Module	COM741
eu l	Credit value	20	Credit value	20	Credit value	20
တ	Core/Option	Core	Core/Option	Core	Core/Option	Core
	Mod leader	Vic Grout	Mod leader	Nigel Houlden	Mod leader	Nigel Houlden

		Remote		Network	Remote	Technological
	Mod title	Access &	Mod title	Protocols &	Access &	Horizon-
		Security		Algorithms	Security	Scanning
7	Mod code/	COM743	Mod code/	COM740	Mod code/	COM745
) ter	'New' Module	COW1743	'New' Module	CON1740	'New' Module	CON1743
Semester	Credit value	20	Credit value	20	Credit value	20
Ser	Core/Option	Core	Core/Option	Core	Core/Option	Core
	Mod leader	Nigel Houlden	Mod leader	Nigel	Mod leader	Vic Grout
	Mod leadel	Nigei Houlden	Mod leader	Houlden	woo leader	vic Grout

ter 3	Mod title	Dissertation
	Mod code/ 'New' Module	COM738
Semester	Credit value	60
)en	Core/Option	Core
0)	Mod leader	Rich Picking

MSc Cyber Security (Full-time)

	Level 7					
_	Mod title	Postgraduate Study and Research Methods	Mod title	Advanced Ethical Hacking	Mod title	Applied Cryptography
Semester '	Mod code/ 'New' Module	COM742	Mod code/ 'New' Module	COM733	Mod code/ 'New' Module	COM735
eu	Credit value	20	Credit value	20	Credit value	20
တ	Core/Option	Core	Core/Option	Core	Core/Option	Core
	Mod leader	Vic Grout	Mod leader	Nigel Houlden	Mod leader	Vic Grout

		Developing		Security and	Remote	Technological
	Mod title	Secure	Mod title	Risk	Access &	Horizon-
er 2		Software		Management	Security	Scanning
	Mod code/	COM737	Mod code/	COM744	Mod code/	COM745
este	'New' Module	COIVITST	'New' Module	CONT44	'New' Module	CON1743
Semester	Credit value	20	Credit value	20	Credit value	20
ű	Core/Option	Core	Core/Option	Core	Core/Option	Core
	Mod leader	Nigel Houlden	Mod leader	Denise Oram	Mod leader	Vic Grout

ter 3	Mod title	Dissertation
	Mod code/ 'New' Module	COM738
Set	Credit value	60
Semester	Core/Option	Core
	Mod leader	Rich Picking

MSc Computer Science (Part-time)

Year 1

Trimester 1	Mod title	Network Hardware and Software	Mod title	Advanced Data Structures and Algorithms
	Mod code/ 'New' Module	COM739	Mod code/ 'New' Module	COM713
	Credit value	20	Credit value	20
	Core/Option	Core	Core/Option	Core
	Mod leader	Nigel Houlden	Mod leader	Jessica Muirhead

	Mod title	Internet and Mobile App Development	Mod title	Security and Risk Management
Trimester 2	Mod code/ 'New' Module	COM708	Mod code/ 'New' Module	COM744
	Credit value	20	Credit value	20
	Core/Option	Core	Core/Option	Core
	Mod leader	Jason Matthews	Mod leader	Denise Oram

	Level 7			
	Mod title	Postgraduate Study and Research Methods		
er 1	Mod code/'New' Module	COM742		
rimester	Credit value	20		
Tri	Core/Option	Core		
	Mod leader	Vic Grout		

	Mod title	Technological Horizon-Scanning
er 2	Mod code/'New' Module	COM745
mester	Credit value	20
Trin	Core/Option	Core
	Mod leader	Vic Grout

	Mod title	Dissertation
er 3	Mod code/'New' Module	COM738
nestel	Credit value	60
Trim	Core/Option	Core
	Mod leader	Rich Picking

MSc Computer Science (Part-time - specific cohorts only)

Year 1

	Level 7			
	Mod title	Postgraduate Study and Research Methods		
1	Mod code/'New' Module	COM742		
ste	Credit value	20		
Semester	Core/Option	Core		
Se	Mod leader	Vic Grout		

	Mod title	Internet and Mobile App	Mod title	Advanced Data Structures and
		Development	Wied the	Algorithms
. 2	Mod code/	COM708	Mod code/	COM713
ter	'New' Module	COM700	'New' Module	COM7 13
Semester	Credit value	20	Credit value	20
Ser	Core/Option	Core	Core/Option	Core
	Mod leader	Jason Matthews	Mod leader	Jessica Muirhead

ter 3	Mod title	Network Hardware and Software	Mod title	Security and Risk Management
	Mod code/ 'New' Module	COM739	Mod code/ 'New' Module	COM744
nes	Credit value	20	Credit value	20
Semester	Core/Option	Core	Core/Option	Core
	Mod leader	Nigel Houlden	Mod leader	Nigel Houlden

	Mod title	Technological Horizon-Scanning
ır 2	Mod code/'New' Module	COM745
ste	Credit value	20
Semester	Core/Option	Core
Se	Mod leader	Vic Grout

ter 3	Mod title	Dissertation
	Mod code/ 'New' Module	COM738
Jes	Credit value	60
Semester	Core/Option	Core
	Mod leader	Rich Picking

MSc Computing (Part-time)

Year 1

Trimester 1	Mod title	Network Hardware and Software	Mod title	Advanced Data Structures and Algorithms
	Mod code/ 'New' Module	COM739	Mod code/ 'New' Module	COM713
	Credit value	20	Credit value	20
	Core/Option	Core	Core/Option	Core
	Mod leader	Nigel Houlden	Mod leader	Jessica Muirhead

Trimester 2	Mod title	Database Systems and Analytics	Mod title	Security and Risk Management
	Mod code/ 'New' Module	COM736	Mod code/ 'New' Module	COM744
	Credit value	20	Credit value	20
	Core/Option	Core	Core/Option	Core
	Mod leader	Bindu Jose	Mod leader	Nigel Houlden

	Level 7		
	Mod title Postgraduate Study and Research Methods		
er 1	Mod code/'New' Module	COM742	
rimester	Credit value	20	
Trim	Core/Option	Core	
	Mod leader	Vic Grout	

	Mod title	Technological Horizon-Scanning
er 2	Mod code/'New' Module	COM745
nestei	Credit value	20
Trim	Core/Option	Core
	Mod leader	Vic Grout

er 3	Mod title	Dissertation
	Mod code/'New' Module	COM738
nester	Credit value	60
Trim	Core/Option	Core
	Mod leader	Rich Picking

MSc Computing (Part-time specific cohorts only)

Year 1

	Level 7		
	Mod title	Postgraduate Study and Research Methods	
7	Mod code/'New' Module	COM742	
ste	Credit value	20	
Semester	Core/Option	Core	
Se	Mod leader	Vic Grout	

Semester 2	Mod title	Database Systems and Analytics	Mod title	Advanced Data Structures and Algorithms
	Mod code/ 'New' Module	COM736	Mod code/ 'New' Module	COM713
me	Credit value	20	Credit value	20
Sel	Core/Option	Core	Core/Option	Core
	Mod leader	Bindu Jose	Mod leader	Jessica Muirhead

	Mod title	Network Hardware and Software	Mod title	Security and Risk Management
3	Mod code/	COM739	Mod code/	COM744
Semester	'New' Module	COM739	'New' Module	COM744
nes	Credit value	20	Credit value	20
Ser	Core/Option	Core	Core/Option	Core
	Mod leader	Nigel Houlden	Mod leader	Nigel Houlden

	Mod title	Technological Horizon-Scanning
ır 2	Mod code/'New' Module	COM745
Semester	Credit value	20
me	Core/Option	Core
Se	Mod leader	Vic Grout

ter 3	Mod title	Dissertation
	Mod code/ 'New' Module	COM738
es	Credit value	60
Semester	Core/Option	Core
	Mod leader	Rich Picking

MSc Computer Networking (Part-time)

Year 1

	Level 7			
	Mod title	Network Hardware and Software	Mod title	Network Techniques & Technologies
Trimester 1	Mod code/ 'New' Module COM739	Mod code/ 'New' Module	COM741	
rime	Credit value	20	Credit value	20
-	Core/Option	Core	Core/Option	Core
	Mod leader	Nigel Houlden	Mod leader	Nigel Houlden

Trimester 2	Mod title	Remote Access and Security	Mod title	Network Protocols and Algorithms
	Mod code/ 'New' Module	COM743	Mod code/ 'New' Module	COM740
rime	Credit value 20	20	Credit value	20
–	Core/Option	Core	Core/Option	Core
	Mod leader	Nigel Houlden	Mod leader	Nigel Houlden

	Mod title	Postgraduate Study and Research Methods
er 1	Mod code/'New' Module	COM742
neste	Credit value	20
Trim	Core/Option	Core
	Mod leader	Vic Grout

er 2	Mod title	Technological Horizon-Scanning
	Mod code/'New' Module	COM745
nester	Credit value	20
Trim	Core/Option	Core
	Mod leader	Vic Grout

Summer period	Mod title	Dissertation
	Mod code/'New' Module	COM738
	Credit value	60
	Core/Option	Core
	Mod leader	Rich Picking

MSc Computer Networking (Part-time - specific cohorts only))

Year 1

	Level 7			
Semester 1	Mod title	Network Hardware and Software	Mod title	Network Techniques & Technologies
	Mod code/ 'New' Module	COM739	Mod code/ 'New' Module	COM741
	Credit value	20	Credit value	20
Ser	Core/Option	Core	Core/Option	Core
	Mod leader	Nigel Houlden	Mod leader	Nigel Houlden

Semester 2	Mod title	Remote Access and Security	Mod title	Network Protocols and Algorithms
	Mod code/ 'New' Module	COM743	Mod code/ 'New' Module	COM740
	Credit value	20	Credit value	20
	Core/Option	Core	Core/Option	Core
	Mod leader	Nigel Houlden	Mod leader	Nigel Houlden

	Mod title	Postgraduate Study and Research Methods
r 3	Mod code/'New' Module	COM742
Semester	Credit value	20
me	Core/Option	Core
Se	Mod leader	Vic Grout

	Mod title	Technological Horizon-Scanning
ır 2	Mod code/'New' Module	COM745
Semester	Credit value	20
me	Core/Option	Core
Se	Mod leader	Vic Grout

ummer period	Mod title	Dissertation
	Mod code/'New' Module	COM738
	Credit value	60
	Core/Option	Core
	Mod leader	Rich Picking
S		

MSc Cyber Security (Part-time)

Year 1

Trimester 3	Mod title	Advanced Ethical Hacking	Mod title	Applied Cryptography
	Mod code/ 'New' Module	COM733	Mod code/ 'New' Module	COM735
	Credit value	20	Credit value	20
	Core/Option	Core	Core/Option	Core
	Mod leader	Nigel Houlden	Mod leader	Vic Grout

Trimester 2	Mod title	Developing Secure Software	Mod title	Security and Risk Management
	Mod code/ 'New' Module	COM737	Mod code/ 'New' Module	COM744
	Credit value	20	Credit value	20
	Core/Option	Core	Core/Option	Core
	Mod leader	Nigel Houlden	Mod leader	Denise Oram

	Level 7		
	Mod title	Postgraduate Study and Research Methods	
er 1	Mod code/'New' Module	COM742	
rimester	Credit value	20	
Trim	Core/Option	Core	
	Mod leader	Vic Grout	

er 2	Mod title	Technological Horizon-Scanning
	Mod code/'New' Module	COM745
mester	Credit value	20
Trin	Core/Option	Core
	Mod leader	Vic Grout

er 3	Mod title	Dissertation
	Mod code/'New' Module	COM738
nester	Credit value	60
Trim	Core/Option	Core
	Mod leader	Rich Picking

MSc Cyber Security (Part-time - specific cohorts only)

Year 1

	Level 7		
	Mod title	Postgraduate Study and Research Methods	
7	Mod code/'New' Module	COM742	
ste	Credit value	20	
Semester	Core/Option	Core	
Se	Mod leader	Vic Grout	

	Mod title	Developing Secure Software	Mod title	Applied Cryptography
er 2	Mod code/ 'New' Module	COM737	Mod code/ 'New' Module	COM735
Semester	Credit value	20	Credit value	20
e L	Core/Option	Core	Core/Option	Core
S	Mod leader	Nigel Houlden	Mod leader	Vic Grout

	Mod title	Advanced Ethical Hacking	Mod title	Security and Risk Management
er 3	Mod code/ 'New' Module	COM733	Mod code/ 'New' Module	COM744
Semester	Credit value	20	Credit value	20
em	Core/Option	Core	Core/Option	Core
S	Mod leader	Nigel Houlden	Mod leader	Denise Oram

	Mod title	Technological Horizon-Scanning
r 2	Mod code/'New' Module	COM745
Semester	Credit value	20
l me	Core/Option	Core
S	Mod leader	Vic Grout

	Mod title	Dissertation
Semester 3	Mod code/ 'New' Module	COM738
es	Credit value	60
jeπ	Core/Option	Core
0)	Mod leader	Rich Picking

23 Intended learning outcomes of the programme

MSc Computer Science

Pos	tgraduate
	Knowledge and understanding
	Level 7
A1	Make professional judgements in the selection of technologies or processes for complex and dynamic scenarios
A2	Give a critical account of current and emerging developments in computer science
A3	Evidence deep comprehension of specialist applications for computer science and recognise the boundaries of knowledge in this domain
A4	Appraise computer network configurations and evaluate their application scenarios
A5	Compare and contrast software development tools and techniques for a variety of practical situations
A6	Demonstrate a sufficiently detailed knowledge of research methods appropriate specifically to their advanced independent-study dissertation/project,
	together with detailed knowledge of the particular area in which the project is carried out

	Intellectual skills
	Level 7
B1	Carry out confident and accurate selection and application of principles and procedures appropriate to the resolution of a range of situations and professional problems associated within the specialist area of computer science
B2	Identify and classify principles, ideas in contemporary information sources, and situations to professional standards; analyse rigorously, effectively, critically and creatively; cope with complexity
В3	Synthesise and predict the future development of current and emerging technologies in the field of computer science, being mindful of external factors
B4	Design and synthesise software and hardware systems in response to a range of technological and practical constraints
B5	Utilise complex, often contradictory, resources and demonstrate how to access these to obtain state-of-the-art knowledge of computer science
B6	Evaluate methods, and plan for, a complex, self-led, investigation in response to a recognised problem or gap in knowledge

	Subject skills	
	Level 7	
C1	Work with a range of computer hardware and networked devices to implement complete and functional systems or platforms	
C2	Be effective in the acquisition and analysis of data, from a range of sources	
C3	Make effective use of a range of theories and techniques applicable to computer science scenarios	
C4	Assimilate and integrate emerging developments in computer science into their own work	

	Subject skills	
	Level 7	
C5	Undertake a significant computer science related thesis which involves an analytical, rigorous and critical approach to problem identification, solution and evaluation	
C6	Synthesise the knowledge, skills and theories from the computing areas covered by the programme in order to solve a complex problem that may require the integration of different computer science techniques and / or technologies	

Prac	Practical, professional and employability skills		
	Level 7		
D1	Display a mastery of working with a range of information sources and be able to objectively arrange these in a holistic manner		
D2	Professionally and efficiently operate a range of IT software, specialist computing applications, and configure a range of hardware devices		
D3	Effectively and proficiently work with stakeholders in designing IT and computer systems in response to their needs and demands		
D4	Make critical decisions regarding technology adoption and success, based upon technological, societal, ethical, and market information		
D5	Conduct and control a piece of research or investigation and professionally present the outcomes in a succinct and reflexive manner		
D6	Carry out a large-scale, independent project and provide detailed and reflective analysis of its efficacy and value		

MSc Computing

Pos	tgraduate
	Knowledge and understanding
	Level 7
A1	Make professional judgements in the selection of technologies or processes for complex and dynamic scenarios
A2	Give a critical account of current and emerging developments in computing
A3	Evidence deep comprehension of specialist applications for computing and recognise the boundaries of knowledge in this domain
A4	Appraise computer network configurations and evaluate their application scenarios
A5	Select and design tools for solving real-world problems that require the integration of large data sets and analytics
A6	Demonstrate a sufficiently detailed knowledge of research methods appropriate specifically to their advanced independent-study dissertation/project,
	together with detailed knowledge of the particular area in which the project is carried out

	Intellectual skills
	Level 7
B1	Carry out confident and accurate selection and application of principles and procedures appropriate to the resolution of a range of situations and professional problems associated within the specialist area of computing
B2	Identify and classify principles, ideas in contemporary information sources, and situations to professional standards; analyse rigorously, effectively, critically and creatively; cope with complexity
В3	Synthesise and predict the future development of current and emerging technologies in the field of computing, being mindful of external factors
B4	Design and synthesise software and hardware systems in response to a range of technological and practical constraints
B5	Utilise complex, often contradictory, resources and demonstrate how to access these to obtain state-of-the-art knowledge of computing
В6	Evaluate methods, and plan for, a complex, self-led, investigation in response to a recognised problem or gap in knowledge

	Subject skills	
	Level 7	
C1	Work with a range of computer hardware and networked devices to implement complete and functional systems or platforms	
C2	Be effective in the acquisition and analysis of data, from a range of sources	
C3	Make effective use of a range of theories and techniques applicable to computing scenarios	
C4	Assimilate and integrate emerging developments in computing into their own work	
C5	Undertake a significant computing related thesis which involves an analytical, rigorous and critical approach to problem identification, solution and evaluation	
C6	Synthesise the knowledge, skills and theories from the computing areas covered by the programme in order to solve a complex problem that may require the integration of different computing techniques and / or technologies	

Prac	Practical, professional and employability skills	
	Level 7	
D1	Display a mastery of working with a range of information sources and be able to objectively arrange these in a holistic manner	
D2	Professionally and efficiently operate a range of IT software, specialist computing applications, and configure a range of hardware devices	
D3	Effectively and proficiently work with stakeholders in designing IT and computer systems in response to their needs and demands	
D4	Make critical decisions regarding technology adoption and success, based upon technological, societal, ethical, and market information	
D5	Conduct and control a piece of research or investigation and professionally present the outcomes in a succinct and reflexive manner	
D6	Carry out a large-scale, independent project and provide detailed and reflective analysis of its efficacy and value	

MSc Computer Networking

Pos	Postgraduate	
	Knowledge and understanding	
	Level 7	
A1	Make professional judgements in the selection of technologies or processes for complex and dynamic scenarios	
A2	Give a critical account of current and emerging developments in computer networking	
А3	Evidence deep comprehension of specialist applications for computer networking and recognise the boundaries of knowledge in this domain	
A4	Appraise computer network configurations and evaluate their application scenarios	
A5	Compare and contrast the theories and models of network protocols, algorithms and remote access principles	
A6	Demonstrate a sufficiently detailed knowledge of research methods appropriate specifically to their advanced independent-study dissertation/project,	
	together with detailed knowledge of the particular area in which the project is carried out	

	Intellectual skills
	Level 7
B1	Carry out confident and accurate selection and application of principles and procedures appropriate to the resolution of a range of situations and professional problems associated within the specialist area of computer networking
B2	Identify and classify principles, ideas in contemporary information sources, and situations to professional standards; analyse rigorously, effectively, critically and creatively; cope with complexity
В3	Synthesise and predict the future development of current and emerging technologies in the field of computer networking, being mindful of external factors
B4	Design and synthesise computer networks and infrastructures in response to a range of technological and practical constraints
B5	Utilise complex, often contradictory, resources and demonstrate how to access these to obtain state-of-the-art knowledge of computer networking
B6	Evaluate methods, and plan for, a complex, self-led, investigation in response to a recognised problem or gap in knowledge

	Subject skills
	Level 7
C1	Work with a range of computer hardware and networked devices to implement complete and functional systems or platforms
C2	Be effective in the acquisition and analysis of data, from a range of sources
C3	Make effective use of a range of theories and techniques applicable to computer networking scenarios
C4	Assimilate and integrate emerging developments in computer networking into their own work
C5	Undertake a significant computer networking related thesis which involves an analytical, rigorous and critical approach to problem identification,
	solution and evaluation

	Subject skills	
	Level 7	
C6	Synthesise the knowledge, skills and theories from the computing areas covered by the programme in order to solve a complex problem that may	
	require the integration of different computer networking techniques and / or technologies	

Prac	Practical, professional and employability skills	
	Level 7	
D1	Display a mastery of working with a range of information sources and be able to objectively arrange these in a holistic manner	
D2	Professionally and efficiently operate a range of IT software, specialist computing applications, and configure a range of hardware devices	
D3	Effectively and proficiently work with stakeholders in designing IT and computer systems in response to their needs and demands	
D4	Make critical decisions regarding technology adoption and success, based upon technological, societal, ethical, and market information	
D5	Conduct and control a piece of research or investigation and professionally present the outcomes in a succinct and reflexive manner	
D6	Carry out a large-scale, independent project and provide detailed and reflective analysis of its efficacy and value	

MSc Cyber Security

Pos	Postgraduate	
	Knowledge and understanding	
	Level 7	
A1	Make professional judgements in the selection of technologies or processes for complex and dynamic scenarios	
A2	Give a critical account of current and emerging developments in cyber security	
A3	Evidence deep comprehension of specialist applications for cyber security and recognise the boundaries of knowledge in this domain	
A4	Relate the theories and paradigms of security, risk and information management to the backdrop of a range of cyber attacks and penetration	
	methods	
A5	Evaluate the principles and approaches for secure software development in a constantly developing landscape of cyber attacks	
A6	Demonstrate a sufficiently detailed knowledge of research methods appropriate specifically to their advanced independent-study dissertation/project,	
	together with detailed knowledge of the particular area in which the project is carried out	

	Intellectual skills
	Level 7
B1	Carry out confident and accurate selection and application of principles and procedures appropriate to the resolution of a range of situations and professional problems associated within the specialist area of cyber security
B2	Identify and classify principles, ideas in contemporary information sources, and situations to professional standards; analyse rigorously, effectively, critically and creatively; cope with complexity
В3	Synthesise and predict the future development of current and emerging technologies in the field of cyber security, being mindful of external factors
B4	Formulate a range of strategies and advanced techniques for secure and auditable information and data storage in contemporary situations
B5	Utilise complex, often contradictory, resources and demonstrate how to access these to obtain state-of-the-art knowledge of cyber security
B6	Evaluate methods, and plan for, a complex, self-led, investigation in response to a recognised problem or gap in knowledge

	Subject skills
	Level 7
C1	Work with a range of cyber security technologies and devices to implement complete and functional systems or platforms
C2	Be effective in the acquisition and analysis of data, from a range of sources
C3	Make effective use of a range of theories and techniques applicable to cyber security scenarios
C4	Assimilate and integrate emerging developments in cyber security into their own work
C5	Undertake a significant cyber security related thesis which involves an analytical, rigorous and critical approach to problem identification, solution and
	evaluation

	Subject skills	
	Level 7	
C6	Synthesise the knowledge, skills and theories from the computing areas covered by the programme in order to solve a complex problem that may	
	require the integration of different cyber security techniques and / or technologies	

Prac	Practical, professional and employability skills	
	Level 7	
D1	Display a mastery of working with a range of information sources and be able to objectively arrange these in a holistic manner	
D2	Professionally and efficiently operate a range of IT software, specialist computing applications, and configure a range of hardware devices	
D3	Effectively and proficiently work with stakeholders in designing IT and computer systems in response to their needs and demands	
D4	Make critical decisions regarding technology adoption and success, based upon technological, societal, ethical, and market information	
D5	Conduct and control a piece of research or investigation and professionally present the outcomes in a succinct and reflexive manner	
D6	Carry out a large-scale, independent project and provide detailed and reflective analysis of its efficacy and value	

24 Curriculum matrix

MSc Computer Science

	Module Title	Core or option?	A1	A2	A3	A4	A5	A6	B1	B2	B 3	B4	B 5	B 6
	Postgraduate Study and Research Methods	Core			•									
PgC	Network Hardware and Software	Core												
	Security and Risk Management	Core												
	Advanced Data Structures and Algorithms	Core												
PgD	Internet and Mobile App Development	Core												
	Technological Horizon-Scanning	Core												
MSc	Dissertation	Core	•	•	•			•	-	•			•	-
	Module Title	Core or option?	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4	D5	D6
	Postgraduate Study and Research Methods	Core												
PgC	Network Hardware and Software	Core												
	Security and Risk Management	Core												
۵	Advanced Data Structures and Algorithms	Core												
PgD	Internet and Mobile App Development	Core												
	Technological Horizon-Scanning	Core												
MSc	Dissertation	Core		•	•	•	•	•	•	•	•	•	•	•

MSc Computing

	Module Title	Core or option?	A1	A2	A3	A4	A5	A6	B1	B2	B 3	B4	B 5	B 6
	Postgraduate Study and Research Methods	Core												
PgC	Network Hardware and Software	Core												
*	Security and Risk Management	Core												
	Advanced Data Structures and Algorithms	Core												
PgD	Database Systems and Analytics	Core												
	Technological Horizon-Scanning	Core												
MSc	Dissertation	Core	•	•	-			•	•	•			•	•
	Module Title	Core or option?	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4	D5	D6
	Postgraduate Study and Research Methods	Core		•										
PgC	Network Hardware and Software	Core												
	Security and Risk Management	Core												
0	Advanced Data Structures and Algorithms	Core												
PgD	Database Systems and Analytics	Core												
_	Technological Horizon-Scanning	Core										•		
MSc	Dissertation	Core		•	•	-	•	-	•	-	-	-	•	•
			<u> </u>	<u> </u>										i

MSc Computer Networking

	Module Title	Core or option?	A1	A2	A3	A4	A5	A6	B1	B2	B 3	B4	B 5	B 6
	Postgraduate Study and Research Methods	Core												
PgC	Network Hardware and Software	Core												
*	Network Techniques & Technologies	Core												
	Remote Access and Security	Core												
PgD	Network Protocols and Algorithms	Core												
	Technological Horizon-Scanning	Core												
MSc	Dissertation	Core	•	•	•			•	•	•			•	•
	Module Title	Core or option?	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4	D5	D6
	Postgraduate Study and Research Methods	Core												
PgC	Network Hardware and Software	Core												
	Network Techniques & Technologies	Core								-				
	Remote Access and Security	Core												
PgD	Network Protocols and Algorithms	Core												
	Technological Horizon-Scanning	Core												
MSc	Dissertation	Core		•	•	•	•	•	•	•	•	-	•	•
														1

MSc Cyber Security

	Module Title	Core or option?	A1	A2	A3	A4	A5	A6	B1	B2	B 3	B4	B 5	B 6
	Postgraduate Study and Research Methods	Core			-					•				•
PgC	Advanced Ethical Hacking	Core												
σ.	Security and Risk Management	Core												
	Applied Cryptography	Core												
PgD	Developing Secure Software	Core												
	Technological Horizon-Scanning	Core												
MSc	Dissertation	Core	•	•	•			•	•	•			•	•
	Module Title	Core or option?	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4	D5	D6
	Postgraduate Study and Research Methods	Core												
PgC	Advanced Ethical Hacking	Core												
Ψ.	Security and Risk Management	Core												
	Applied Cryptography	Core												
PgD	Developing Secure Software	Core												
_ +	Technological Horizon-Scanning	Core												
MSc	Dissertation	Core		-	-	-	-	-	-	-	-	•	•	-

25 Learning and teaching strategy

The programme is informed and guided by the Computing Learning, Teaching and Assessment strategy. It seeks to assist the student to become an independent learner, delivering subject skills alongside the embedding of skills for employment. The curriculum is designed to encourage an appreciation for learning. Learning is enriched by appropriate underpinnings, current research, industrial applications and the development of transferable skills.

The majority of scheduled learning and teaching activities is through attendance at lectures, guest talks, tutorials, and labs. Attendance at external events and field trips are made available and as when they are appropriate and practicable. These modes of contact provide students with the ability to develop and practice the range of learning outcomes associated with the programme, ranging from the theoretical to the practical.

In the early stages of each module, problems will be well defined and limited in scope and scale. At later stages, problems will become less structured (to encourage reflection on problem issues) and open-ended (to give scope to propose and evaluate alternative solution strategies). Case studies are used when appropriate to integrate study topics and to underline vocational relevance. Coursework assignments are important throughout.

As the programme progresses, students are expected to demonstrate increasing proficiency in use of IT tools and techniques to support production of technical documentation, to enhance oral and written presentations, and to aid organisation of personal study material.

Part two of the programme is the Dissertation and is an area that has been given special consideration since it is such a significant piece of work undertaken by the student. While students study the taught part of the course they are given a 1 hour a week special lecture to inform them of the requirements of the Dissertation. This module is run so that it coincides with the end of the taught part of the course, which means that on completion of part one students can start immediately on producing the proposal for the dissertation. On submission of the proposal it is assessed and passed to an appropriate supervisor with expertise in the area that the student wishes to carry out the work. It is the supervisor's task to work with the student to improve the proposal to a level that is acceptable and achievable for a master's level within the time constraints. Students work independently on the dissertation having regular meetings with the supervisor. It is important that the student identifies at the proposal stage the various requirements needed to complete the dissertation e.g. equipment, software, space.

Extensive use is made of the University's Virtual Learning Environment (VLE), Moodle, to provide students with access to a range of delivery, and supporting, materials related to each of the modules featured on the programme. In addition to the materials used during the taught sessions, the VLE is used to provide students with additional content such as quizzes, videos, audio recordings, external links, technical reports, research papers, and so forth. The VLE also provides students with the ability to communicate using discussion forums and is the platform primarily used in the issuing, submission, marking, and feedback of student assessment.

26 Work based/placement learning statement

A work placement is not offered as part of these MSc programmes.

27 Welsh medium provision

The programmes will be delivered through the medium of English. Students are entitled to submit assessments in the medium of Welsh.

28 Assessment strategy

A range and diversity of assessment is provided on the programme as a way to allow students with multiple types of opportunity to demonstrate the skills and knowledge that they are developing over the duration of the programme and to help support inclusivity. This mixture often makes use of assessment methods where students must document a process or solution to a challenge, but also in the submission of artefacts, such as computer programs, databases, media assets, and practical network implementations.

Module code & title	Assessment type and weighting	Assessment loading	Indicative submission date
Postgraduate Study	Coursework 40%	1500 words	Sem1, Wk6
and Research Methods	Coursework 60%	2500 words	Sem1, Wk12
Network Hardware and	In-class test 20%	2.5 hrs	Sem1, ongoing
Software	Practical 30%	2 hrs	Sem1, ongoing
	Coursework 50%	2000 words	Sem1, Wk12
Network Techniques &	In-class test 20%	2.5 hrs	Sem1, ongoing
Technologies	Practical 30%	2 hrs	Sem1, ongoing
	Coursework 50%	2000 words	Sem1, Wk12
Internet and Mobile App Development	Coursework 100%		Sem2, Wk12
Advanced Data	Portfolio 70%		Ongoing: Wk 2
Structures and	Project 30%		to Wk 8, Sem 1
Algorithms	-		Week 12, Sem 1
Database Systems and	Coursework 50%	N/A	Sem2, Wk6
Data Analytics	Coursework 50%	3000 words	Sem2, Wk12
Remote Access &	Case Study 100%		Sem2, ongoing
Security	-		
Network Protocols &	In-class test 15%	1.15 hrs	Sem2, ongoing
Algorithms	Practical 20%	2 hrs	Sem2, ongoing
	Coursework 65%	3000 words	Sem2, Wk12
Advanced Ethical	Coursework 60%	3000 words	Sem1, Wk6
Hacking	Practical 40%	2 hrs	Sem1, Wk12
Security and Risk	Case Study 70%	4000 words	Sem1, Wk6
Management	In-class test 30%	1.5 hrs	Sem1, Wk12
Developing Secure	Portfolio 70%	4000 words	Sem2, Wk6
Software	In-class test 30%	1.5 hrs	Sem2, Wk12
Applied Cryptography	Exam 50%	2 hrs	Sem2, Wk13-14
	Practical 50%	3000 words	Sem2, Wk10
Technological Horizon-	Presentation 40%	30 minutes	Sem2, Wk6
Scanning	Report 60%	3500 words	Sem2, Wk12
Dissertation	Research proposal 10%	2000 words	Sem3, Wk1
	Dissertation 90%	15-20000 words	Sem3, Wk12
		OR 17 page	
		journal paper	

29 Assessment regulations

University regulations for Taught Masters Degrees apply.

Derogations

N/A

Non-credit bearing assessment

N/A

Restrictions for trailing modules (for taught masters programmes only)

None other than Postgraduate Study and Research Methods.

30 Programme Management

Programme leader

Nigel Houlden

Module Leaders

Nigel Houlden

Prof. Vic Grout

Mrs. Bindu Jose

Mrs. Denise Oram

Mr. Jason Matthews

Prof. Richard Picking

Link to Staff Profiles

https://www.glyndwr.ac.uk/en/StaffProfiles/VicGrout/

https://www.glyndwr.ac.uk/en/StaffProfiles/BinduJose/

https://www.glyndwr.ac.uk/en/StaffProfiles/DeniseOram/

https://www.glyndwr.ac.uk/en/StaffProfiles/JasonMatthews/

https://www.glyndwr.ac.uk/en/StaffProfiles/RichardPicking/

31 Quality Management

Programme Management

The designated Programme Leader who will be responsible for the day-to-day running of the programme, including the following:

- The management and development of curriculum and the course portfolio
- Student tracking and student records
- Collation of assessment data and presentation of data at assessment boards
- Management/co-ordination of overall assessment activities across the programme
- Liaison with external bodies and agencies
- Quality assurance and annual monitoring, including compilation of the Annual
- Monitoring Report
- Co-ordination of admissions activities and other recruitment activities, including relevant publicity activities

At module level there is devolved responsibility to Module Leaders for the following:

- The maintenance and development of teaching and learning materials for all students enrolled on the module
- The publishing and updating of module timetables, which shall include a
 weekly schedule of module sessions and required reading, to be distributed
 to students at the start of all modules
- The setting, marking and collation of marks for all module assessments and examination papers, including resit assessments, and submission of student results to the Programme Leader
- Tutorial support for students taking the module which they are responsible
- Quality monitoring, including processing of annual student feedback questionnaires and, where appropriate, feedback for individual modules
- Liaison with part-time members of staff involved in module teaching

Student Feedback

The University has procedures for the regular review of its educational provision, including the annual review of modules and programmes, which draw on feedback from such sources as external examiner reports, student evaluation, student achievement, and progression data. In addition, programmes are subject to a programme periodic review (PPR) and re-validation in year 5 that includes external input.

Feedback from students plays a critical part in informing the Faculty's strategic thinking. It also allows the Faculty to evaluate how its most important group of stakeholders, its students, views its service provision. Students can provide feedback in a number of ways, for instance:

Student Voice Forum (SVF): Chaired by a member of academic staff from outside the programme, will be held at least once per semester. The Chair will minute student feedback for action/response by the Programme Leader. Minutes of the SVFs and the response from the Programme Leader will be posted on the programme pages of Moodle. All programmes have representation at SVFs.

<u>Student Evaluation of Modules (SEM):</u> Module Leaders will distribute SEMs at the end of each module. A summary of the analysis of the SEMs, along with any other feedback (e.g. from the student suggestion box), will be passed to the Programme Leader for action/response.

Feedback on assessed work: Students submit work in a number of different ways depending on the module being studied. Wherever possible Moodle is used for electronic submission and Turnitin to check the similarity score and tutors give feedback via this interface within 3 working weeks. Practical work is developed and assessed by having students demonstrate their work, again immediate feedback is given. At the end of a module, overall feedback is provided along with a clear indication of what area the student needs, if necessary, to resubmit or what areas were good and which areas can be improved on.

32 Research and scholarship activity

Research within the programme team is co-ordinated at a Faculty level and, at a local level manifests itself through the Applied Research in Computing Laboratories (ARClab) group. ARClab's research encompasses the broader computing subject and is concentrated in the following areas:

IoT, Networking and Cybersercurity

- Audio and Affective Computing
- Health and Assisted Living Technologies
- HCI, Augmented and Virtual Reality
- CAD/Engineering software
- MIS/Business
- Ethics/professionalism
- Robotics/Al

ARClab has taken over from the previous Computing research groups of Creative and Applied Research for the Digital Society (CARDS) and the Centre for Applied Internet Research (CAIR), which built up their activities very impressively over the past ten years. The commitment and enthusiasm of the staff is very evident and significant outputs have been achieved over a whole range of activities, covering publications, grant winning, conference organisation, industrial engagement etc.

Significant achievements during the recent past include the very professional organisation of a conference to the highest international standards; the development of a large-scale EU-funded research project, the steady production of conference publications, in addition to a sound proportion of academic journal publications; the setting up of a usability laboratory - a relatively unique facility in Wales; the importing of a substantial new base of specialism in wireless technologies and a success in a radio frequency identification tagging (RFID) project, which is intended to be rapidly grown into an additional research theme.

33 Learning support

Institutional level support for students

The University has a range of departments that offer the support for students as:

- Library & IT Resources
- The Assessment Centre
- DisAbility Support Team
- Irlen Centre
- Careers Centre and Job Shop
- Zone Enterprise hub
- Chaplaincy
- Counselling & Wellbeing
- Student Funding and Welfare
- International Welfare
- Student Programmes Centre
- Glyndŵr Students' Union

Faculty support for students

All students at Wrexham Glyndŵr University are allocated a Personal Tutor whose main responsibility is to act as the first point of contact for their personal students and to provide pastoral and academic support throughout their studies at the University. It is a vital role to support student engagement and retention, and to help every student to success to the best of his or her ability.

Programme specific support for students

Induction

New students on the programme will undergo an induction programme that will provide them with a full introduction to the programme and will include elements of work on study skills and professional development.

Student Handbook

All students on the programme will receive a Student Handbook, provided electronically via the VLE, which will contain details and guidance on all aspects of the programme and forms of student support and guidance, programme-based, and Faculty-based.

Computing Labs

The majority of Computing provision is located on the Wrexham campus, including teaching rooms, lecture theatres, staff offices, and specialist labs. There are a number of specialist computer labs on the Wrexham campus, including general purpose computing laboratories that support the teaching. These specialist labs offer access to a range of software that is utilised within the modules defined in the programme.

Open Door Policy

Computing operates an Open Door policy, meaning that academic staff are readily and easily accessible and approachable for students outside of scheduled learning and teaching hours. Staff can be approached without the need for a formal appointment to be made.

Progress Review and Attendance Monitoring

Student attendance will be subject to regular monitoring through registers, and this will be a means of addressing issues of student support. There will also be regular reviews for each student with personal tutors.

34 Equality and Diversity

Glyndŵr University is committed to providing access to all students and promotes equal opportunities in compliance with the Equality Act 2010 legislation. This programme complies fully with the University's Equal Opportunities Policy (http://www.glyndwr.ac.uk/en/AboutGlyndwrUniversity/Governance/TheFile,64499,en.pdf), ensuring that everyone who has the potential to achieve in higher education is given the chance to do so.

DATE OF APPROVAL	
Date of programme delivery approval event:	28 November 2019 Desk based re-approval conducted by APC
Date of approval by Academic Board:	09 December 2019



APPENDIX 1 – PARTNER PROVIDER SUPPLEMENT TO PROGRAMME SPECIFICATION

When printed this becomes an uncontrolled document. Please check the Programme Directory for the most up to date version by clicking here.

Programme Title(s): MSc Computing

This is the intended award title from the definitive Programme Specification and what will be printed on the award certificate.

1	Awarding body
	Glyndŵr University
2	Partner Provider
	Londontec City Campus
3	Location of delivery
	No. 6/1A Pepiliyana Road, Gamsabha Junction, Nugegoda, WP 10250 Sri Lanka
4	Faculty/Department
	Faculty of Arts, Science and Technology
5	Mode of study
	Full time
6	Frequency / timing of intake/s
	2 intake point per academic year (Sep & Feb)
7	Language of study
	English
8	Name of academic link (correct at the point of programme approval)
	John Worden

9 GU Approved Partner Programme Delivery Schedule(s)

September intake – f/t

Semester 1	COM742	COM736	COM713
Sep-Jan	Postgraduate Study and Research	Database Systems and Data Analytics	Advanced Data Structures and Algorithms
	Methods	and Data Analytics	and Algorithms
	Methods		
Semester 2	COM739	COM744	COM745
Feb-May	Network Hardware	Security and Risk	Technological Horizon-
	and Software	Management	Scanning
Semester 3	COM738		
Jun-Aug	Dissertation		

January intake – f/t

Semester 2	COM745	COM739	COM744
Feb-May	Technological	Network Hardware	Security and Risk
	Horizon- Scanning	and Software	Management
Semester 3	COM713 Advanced	COM742	COM736
Jun-Aug	Data Structures and	Postgraduate Study	Database Systems and
	Algorithms	and Research	Data Analytics
		Methods	
Semester 1	COM738		
Sep-Jan	Dissertation		

DATE OF APPROVAL	
Date of programme delivery approval event:	29 May 2020
Date of approval by Academic Board:	11 June 2020



APPENDIX 2 – PARTNER PROVIDER SUPPLEMENT TO PROGRAMME SPECIFICATION

When printed this becomes an uncontrolled document. Please check the Programme Directory for the most up to date version by clicking here.

Programme Title(s): MSc Computing

This is the intended award title from the definitive Programme Specification and what will be printed on the award certificate.

1	Awarding body
	Glyndŵr University
2	Partner Provider
	Independent Science and Technology (IST) College
3	Location of delivery
	68, Syngrou Avenue, 11742 Athens
4	Faculty/Department
	Faculty of Arts, Science and Technology
5	Mode of study
	Full time
6	Frequency / timing of intake/s
	1 intake point per academic year (September)
7	Language of study
	English
8	Name of academic link (correct at the point of programme approval)
	John Worden

9 GU Approved Partner Programme Delivery Schedule(s)

September intake – f/t

		Year 1	
Semester 1	COM742 Postgraduate Study and Research Methods	COM739 Network Hardware and Software	COM713 Advanced Data Structures and Algorithms
Semester 2	COM736 Database Systems and Analytics	COM744 Security and Risk Management	COM745 Technological Horizon Scanning
Semester 3	COM738 Dissertation		

Semester 1 – Sept to Jan

Semester 2 – Feb to Apr

Semester 3 – May to Aug

Assessment is subject to GU's regulations. GU assessments are to be used however if there are any additional assessments required to be written by IST as advised by GU, IST are to submit them to GU for approval by GU prior to use. The assessment schedule at IST will be aligned with that of GU.