

BSc (Hons) Computing

Wrexham Glyndwr University RIFYSGOL

NIVERSITY

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Wrexham Glyndwr University

Established in 2008, Wrexham Glyndwr University are one of the youngest universities in the UK and is a vibrant, friendly place where each student's learning and future is given personal attention. Starting out with just the Wrexham campuses, they now have sites in North Wales and London. Every year they are developing to offer more people the opportunity to access their courses and growing their facilities to keep courses at the cutting edge and to develop their practical learning opportunities for students.

Despite being one of the youngest, Glyndwr University received a silver award for the quality of teaching by the Teaching Excellence Framework, in June 2017. WGU has been ranked **2nd in the UK** for teaching satisfaction in The Guardian University Guide 2022 and named one of the **highest risers climbing 41 places**.

Wrexham Glyndwr has been rated second in the UK for the quality of our teaching in The Times and Sunday Times Good University Guide 2022.

Ranking and Qualification



The Guardian -The best UK universities 2022 rankings UK Ranking



The Complete University Guide -University League Tables 2023



WES Approved



Teaching Excellence Framework



European Qualifications Framework



UK Quality Assured

Research Excellence Framework



UK EDUCATION

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BSc (Hons) Computing



Course Description

Computing specialists are in high demand as technology now plays a role in almost everything we do. Our computing degree combines the core principles of the field with a forward-looking approach to embracing and driving new developments.

The subject area is 1st in Wales for learning opportunities and academic support (WGU analysis of unpublished 2019 NSS data).

Students will:

- be prepared for a career in an exciting industry with highly sought-after skills in computer programming, database development, networking, website development and information systems design
- develop practical skills useful in any field of business, such as problem-solving, teamwork, project management and how to use information technology effectively and understanding specialised software
- gain practical experience through work placements and working on real-life projects

Course Content

IT Project Management

Distributed Data and Data Analytics

Advanced Mobile Development

Future Technologies

Dissertation (Major Project)

Progression Pathways



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Case 1:

If you owned recognized professional qualification(s) plus at least 3 years of full-time work experience at senior level

Case 2:

Completed an Associate Degree or a Higher Diploma recognised by awarding institutions approved by Wrexham Glyndwr

University



The shortest time to complete the course: **12 months**

(Completion time depends on student progress) 120 credits required to complete the course

+

Programme Features

100% online learning, which can be accessed from your phone, pc or tablet at home or on the move. On successful completion of your studies, you'll be invited to attend a graduation ceremony on campus.

Study Mode

Online and Part-time

Duration of Program

Every program can be completed in 1 year.

Assessment

Performance of students are assessed on a continuous basis through assignments and class participation.

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Entry Requirements

Existing educational qualifications and work experience will be directly taken into programme and allowing for module exemptions, please email or whatsapp us for detail

English Language Requirements

- IELTS 5.5; Reading and Writing must be at 5.5 or
- HKALE Use of English at Grade E or above, or HKDSE Examination English Language at Level 3 or above or
- Satisfy the examiners in UK EDUCATION qualifying examination, if required.

Medium of Instruction

All modules will be taught in English.

I Programme Structure

This BSc course is divided into two parts, Postgraduate Diploma PLUS BSc Top Up.

Postgraduate Diploma (120 Credits) QUALIFI Level 4 Diploma in Information Technology

Start Date: Duration: Mode of Study: Structure:

Anytime Anytime Distance Learning 4 Mandatory plus

4 Mandatory plus 2 electives only with no exam

Mandatory Units

- 1. Information Technology and IT Ethics
- 2. Mathematics and Statistics for IT
- 3. PC Maintenance and Operating Systems
- 4. Computer Graphics Editing and Database Concepts

Optional Units

Select at least two of the following:

- 1. Logical IT Networking
- 2. Physical IT Networking
- 3. Web Programming
- 4. Graphical User Interface (GUI)
- 5. Programming Concepts and Java for Android Programming

Postgraduate Diploma (120 Credits) QUALIFI Level 5 Diploma in Information Technology

Start Date: Duration: Mode of Study: Structure: Anytime Anytime

Distance Learning 4 Mandatory plus 2 electives only with no exam

Mandatory Units

- 1. Technopreneurship
- 2. Network Security
- 3. C#.NET Programming
- 4. System Administration

Optional Units

Select at least two of the following:

- 1. Network Routing and Switching
- 2. Network Design and Administration
- 3. Content Management Systems
- 4. Web Design
- 5. Business to Business (B2B) E-commerce
- 6. Business to Consumer (B2C) E-commerce

Programme Structure

BA Top Up (120 Credits) Wrexham Glyndwr University BSc (Hons) Computing Top-Up

Start Date:	September / January
Duration:	12 months, course exemption will be provided base on
	experience
Mode of Study:	Distance Learning
Structure:	4 Courses + One Dissertation only with no exam

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IT Project Management

The module aims to encourage a critically and theoretically informed and reflective approach to IT project management and to develop students' understanding of the current issues affecting the management of IT projects. The module will permit students to critically evaluate the basic tools and techniques used in IT project management and increase selfawareness and insight into both professional and ethical issues relevant to the discipline of IT projects.

Distributed Data and Data Analytics

This module aims to extend the students' knowledge of database system and data analytics by introducing them to a number of advanced topics and techniques. Topics covered include distributed data, data warehousing, data intensive computing, data science and data analytics, personalised data and other advanced database topics.

Advanced Mobile Development

To provide guidelines, design principles and experience in developing advanced object oriented apps for mobile devices, such as Android based devices and/or Apple iOS based devices. The business model for App-Store marketing (Google Play and other variants) will be discussed as a paradigm for the development of new start-up companies. Social Issues, which consider M-Commerce and Mobile Payment systems, and issues to do with Mobile Privacy and Ethics.

Future Technologies

The aim of this module, always to be scheduled as close to the end of the overall programme as possible, is to allow students to identify, critically examine and debate a range of current and future technical and social issues in computing, engineering and technology and, in so doing, develop a critical awareness of the impact of current and emerging research and development. It will enable students to gain a broad general knowledge of some current research areas in computing and engineering and their application in industry, commerce and further afield. In a general sense, the module will introduce students to the field of 'Futurology'. Both the emphasis on looking ahead and the clear balance between technological advancement and social implications are essential features of the module.

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Dissertation (Major Project)

The overall purpose of the project is to prepare the students for the kind of tasks and situations they may encounter in the workplace when they graduate and find their first employment. The specific objectives of the project are that the students learn to organise, sustain and report on a substantial piece of work over a period of several months, to apply the theoretical knowledge they have learned on taught modules to a realistic problem; and to extract and analyse relevant – but often contradictory – sources of information by themselves from manuals, books and research journals. The project also provides the student with an opportunity to specialise in an area of personal interest.

Indicative Assessment :

Assessment of the project will be based on: the literature review, poster presentation, the final report and artefact, an oral presentation/ demonstration and the project tutor's assessment of individual effort, initiative and ability. Students will be assessed individually, although they may be working together in a group on a larger project. (12,000 words)



QUALIFI Level 4 Diploma in Information Technology Module Outline

BUS 4.1 Information Technology and IT Ethics

This unit aims to develop learners' knowledge and use of information technology including the use of standard office applications to prepare documents and presentations. This includes computer software and hardware, basic computer operations, application software, operating systems, information systems and IT-related issues in computing. The unit also seeks to provide learners with an awareness of ethical issues essential to an IT professional. This includes ethics in the cyberspace, intellectual property, privacy, the issue of security and reliability, how computing affects our health, professional code of ethics and how IT changes our daily lives.

Learning Outcomes

- · Understand the applications of information technology
- Understand the ethics involved in information technology

BUS 4.2 Mathematics and Statistics for IT

This unit aims to provide an opportunity to learn mathematics and statistics and equip learners with the mathematical skills to analyse and solve problems that will enable them to work within the field of IT. The unit covers number systems, logic, relations, functions, quadratic equations, quadratic functions, simultaneous equations, polynomial equations, exponential functions, logarithmic functions, coordinate geometry and matrices. The unit provides an opportunity to learn statistics and equip learners with the descriptive and analytical methods for dealing with variability in observed data. It covers graphical presentation of data, descriptive statistics, index numbers, correlation and regression, time series, probability and statistical inference.

- Understand the mathematics underpinning information technology
- Understand the statistics underpinning information technology

BUS 4.3 PC Maintenance and Operating Systems

This unit aims to provide knowledge of personal computer hardware. Successful completion of this unit will enable learners to install a computer system unit and operating system and conduct troubleshooting. The unit provides the essential knowledge of computer hardware, the software needed to make a hardware work, the components of the hardware and the technologies and principles that support the components. In addition to this knowledge, learners will be able to assemble computer hardware to build a full set PC, understand how to install the operation system and how to conduct troubleshooting in faulty hardware.

This unit also aims to provide the basic concepts about operating systems and to be able to install, configure and operate two commonly used operating systems. It includes an overview of Windows and Linux operating systems, the installation and configuration of these systems; the use of proper file systems; managing groups and users; installing and uninstalling applications on these two operating systems; operating basic command-line environment; manipulating simple files and printersharing.

Learning Outcomes

- Understand a range of operating systems
- Understand Windows and Linux operating systems

BUS 4.4 Computer Graphics Editing and Database Concepts

This unit aims to explain the concepts of photo editing. This will enable learners to insert photos into documents such as user manuals and the IT structure of an organization. The photos may need to be touched up before they are ready for use. This mainly involves using Adobe Photoshop and Adobe Illustrator for photo/ image editing and designing. The unit delivers skills in photo retouching and digital drawing to address the issues of digital image design. It emphasizes exploration, techniques, media, ideas development and production techniques.

This unit also provides the fundamental concepts of a database system through Database Management System (DBMS), relational databases, entity relationship modelling and normalization. Learners are also required to create database systems using the database language of Structured Query Language (SQL).

- Use computer graphic editing techniques to edit photos and create illustrations
- Create a database system

BUS 4.5 Logical IT Networking

This unit aims to provide learners with knowledge of logical networking. It covers Transmission Control Protocol (TCP) / Internet Protocol (IP), Local Area Networks (LAN) and Wide Area Networking (WAN), including IP address and subnetting.

Learning Outcomes

- Understand logical networking
- Understand the components and interfaces between different logical networking attributes
- Understand the security requirements of a logical network

BUS 4.6 Physical IT Networking

This unit aims to provide learners with knowledge of physical networking and basic network administration skills. It covers knowledge of computer networks.

Learning Outcomes

- Apply the components of physical networking
- Understand the components and interfaces between different physical networking attributes
- Install security protocols in a physical network

BUS 4.7 Web Design

This unit aims to provide learners with skills in website design and development. This includes techniques for writing web pages with Hypertext Markup (HTML) and Cascading Style Sheets (CSS).

Learning Outcomes

- · Understand the principles of website design
- Design a website

BUS 4.8 Web Programming

This unit aims to provide learners with web programming knowledge and skills including advanced technologies to upload content onto the internet. Key components of the unit include the application of Personal Home Page (PHP) (Hypertext Pre-processor) and the integration of PHP with My Structured Query Language (MySQL) database.

- Understand the concepts, tools and techniques underpinning web programming
- Carry out web programming

BUS 4.9 Graphical User Interface (GUI)

This unit aims to provide learners with Graphical User Interface (GUI) programming skills. This includes objects, methods and instance variables, problem solving concepts, programming languages and GUI programming. The main focus is on the design principles of GUIs, events handling, classes and interfaces, the use of layout managers, buttons, labels, lists, text fields and panels creation and manipulation, colours and font manipulation.

Learning Outcomes

- Understand the concepts, tools and techniques underpinning Graphical User Interface (GUI)
- Create a GUI application using Java

BUS 4.10 Programming Concepts and Java for Android Programming

This unit aims to develop programming skills. This unit includes variables, control and decision (if and switch) as well as loops and program control (for, while, do-while).

This unit also enables learners to develop software for Android telephones using Java development tools. The emphasis is on developing applications as a community that run on the Android platform. Successful completion of this unit will give learners an insight into today's common procedures for getting their mobile application work published.

Learning Outcomes

- Create a computer program
- Create an Android program

QUALIFI Level 5 Diploma in Information Technology Module Outline

BUS 5.1 Technopreneurship

This unit aims to provide learners with the knowledge and skills needed to establish a new techno business. It includes understanding the characteristics of entrepreneurs, planning, marketing and finance.

- Assess the nature of technological entrepreneurship
- Establish a new techno business
- Evaluate the rationale for businesses creation, delivery and capture of value

BUS 5.2 Network Security

This unit aims to provide learners with knowledge of network security issues in a networked environment and the process of preventing and detection common security incidents. The unit covers authentication; attacks and malicious codes; the security of remote access; email and web security; the security of directory and file transfer services; storage media; network security; intrusion detection; physical and security and disaster recovery.

Learning Outcomes

- Understand computer network security
- Understand methods of maintaining computer security

BUS 5.3 C#.NET Programming

This unit aims to provide learners with the basic concepts and principles of ASP. NET programming using C#. This will enable learners to understand how to create dynamic web pages using server side programming techniques. The unit covers component-based programming and how to access records in relational databases. Successful achievement of this unit will enable learners to create their own web applications and make them available on the internet.

Learning Outcomes

- Understand the use of ASP.NET
- Design web applications using ASP.NET and ADO.NET

BUS 5.4 System Administration

This unit aims to provide the knowledge needed to administer a system in Linux and Windows. Topics covered include user and group management; file system management; task automation; shell scripting; Dynamic Host Configuration Protocol (DHCP) servers; mail servers; domain name servers; files and printers sharing; basic utilities and tools; application management; registry; local and group policies; backup policies; restore policies and performance tuning.

- Understand system administration
- Perform user management and file system management

BUS 5.5 Network Routing and Switching

This unit aims to deliver the knowledge needed to carry out switching and the knowledge and skills needed to carry out routing – how to set up and configure a router and switches to interconnect a multi area network. The unit covers computer networks routing and switching including Router Information Protocol (RIP); Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF).

Learning Outcomes

- Understand switching
- Perform routing

BUS 5.6 Network Design and Administration

This unit aims to provide the knowledge and skills needed to enable learners to design a network i.e. how to scale and connect different networks to form an effective inter-connecting network. It covers hierarchical network design; gathering network requirements; identifying network performance issues.

Learning Outcomes

- Understand network design
- Configure a local area network and a VLAN
- Administer a network

BUS 5.7 Content Management Systems

This unit aims to provide learners with the knowledge and skills needed to use content management systems (CMS) as a tool for the creation of digital content. Successful achievement of this unit will enable learners to understand CMS roles, content modelling, content aggregation, publication management and content migration.

- Understand content management systems (CMS)
- Configure a local area network and a VLAN
- Operate a CMS

BUS 5.8 Web Design

This unit aims to provide learners with the skills and knowledge of client side programming and how to create a dynamic web pages using JavaScript (JS) programming language and Adobe Dreamweaver. The unit covers the creation of dynamic web pages that use form validation, validate user input, process user input at client side, dynamic navigation menu and a web client application.

Learning Outcomes

- Understand web design
- Create dynamic web pages

BUS 5.9 Business to Business (B2B) E-commerce

This unit aims to provide learners with knowledge of Business to business (B2B) e-commerce. This includes Electronic Data Interchange (EDI), Electronic Funds Transfer (EFT), online transaction processing, inventory management systems and supply chain management.

Learning Outcomes

- Understand Electronic Data Interchange (EDI)
- Understand Electronic Funds Transfer(EFT)
- Understand online transaction processing (OLTP)
- Understand inventory management systems
- Understand supply chain management

BUS 5.10 Business to Consumer (B2C) E-commerce

This unit aims to provide learners with knowledge of business to consumer e-commerce. This includes the concepts and techniques used in mobile e-commerce and ticketing, the psychology of marketing, artificial intelligence (AI) in image recognition and social commerce.

- Understand the concepts and techniques used in mobile e-commerce and ticketing
- Understand the psychology of marketing
- Understand the use of artificial intelligence (AI) in image recognition
- Understand social commerce



Samples of Certificate & Transcript



About



"The UK Education" provides overseas study counseling services, focusing on assisting your overseas study journey. "The UK Education" has one of the most integrated British school networks among all the local overseas advanced study companies. Our professional counseling team provides one-stop services such as assisting in school applications, arranging interviews, etc. We help to assist students to analyze each school in details, and provide one-on-one consultation services for further studies.



Our Missions

- Provides career path that support students who wish to develop their management skills, enterprise capabilities and opportunities in their chosen field
- Helps students to improve their understanding of any given business environments and organizations and how should they manage and develop in the given situation
- Helps students to develop skills and abilities, and support their professional development

Accredited Partner Centre

