

## EVERYONE HAS AN INNER GENIUS We can help

you find yours

Join our graduates and fast track your way to a successful career



AWARDED SILVER IN THE 2017 TEACHING EXCELLENCE FRAMEWORK





# HND Computing & Systems Development

"The way to be successful in the software world is to come up with breakthrough software, and so whether it's Microsoft Office or Windows, it's pushing that forward. New ideas, surprising the marketplace, so good engineering and good business are one and the same." Bill Gates

#### **COURSE OVERVIEW**

Our HND is a specialist computing course. The course is equivalent to the first two years of an honours degree. It is designed to equip you with the knowledge, understanding and skills required for success in current and future employment in an ever expanding IT industry. You will establish essential skills in network design, computer architecture, software development & systems, web design and maintenance as well as professional development.

#### MODULES

- Unit 1 Business Skills for E-commerce The unit considers the structure and aims of organisations to better understand how they could benefit from an e-commerce system.
- Unit 2 Computer Systems Learn basic system maintenance skills and how to build, configure and test functional computer systems with a given specification.
- Unit 3 Employability and Professional Development The unit considers the skills required for general employment such as interpersonal and transferable skills, and the dynamics of working with others in teams or groups including leadership and communication skills.
- Unit 4 Project Design

For further information please visit howcollege.ac.uk or email our HE Admissions team headmissions@howcollege.ac.uk

LOCATION

WORCESTER WCOM-HD5-1819

UCAS CODE 024G

#### **COURSE LENGTH**

2 years full-time 4 years part-time

#### **TUITION FEES**

£8,000 per year full-time £4,000 per year part-time

#### **ADDITIONAL COSTS**

Additional costs may be incurred for the costs of consumables and trips/ excursions. Professional Development & Practice may incur additional travel and parking charges.

#### AWARD ON SUCCESSFUL COMPLETION

Edexcel BTEC Higher National Diploma in Computing and Systems Development

#### HOW TO APPLY

Full-time applications: www.ucas.com Part-time applications: www.howcollege.ac.uk



HEART OF WORCESTERSHIRE COLLEGE



## EVERYONE HAS AN INNER GENIUS

We can help you find yours

Join our graduates and fast track your way to a successful career



AWARDED SILVER IN THE 2017 TEACHING EXCELLENCE FRAMEWORK





#### Implementation and Evaluation

This unit develops learners' skills of independent enquiry by undertaking a sustained investigation on a technology of the student's choosing.

#### Optional

#### - Unit 5 - Emerging Technology

This unit explores a range of technologies that are on the horizon and the impact that such technologies could bring to society.

#### - Unit 14 - Website Design

This unit considers the whole process of building websites, including identification of need, design, implementation, testing, maintenance and review.

#### - Unit 17 - Database Design Concepts

This unit explores database architecture, DBMS and the use of databases in an organisational context; learners will be able to apply theoretical understanding to design, create and document a database system.

#### - Unit 20 - Event Driven Programming Solutions

This unit gives learners the underpinning concepts of event driven programming and develop skills in one chosen programming language.

#### - Unit 24 - Networking Technologies

This unit lets learners understand computer networking concepts, how they work, how they operate and the protocols, standards and the models associated with networking technology.

#### - Unit 28 - IT Support for End Users

Learners will evaluate how problems affect user productivity, provide technical support activities and produce user manuals, training courses and maintenance plans.

#### - Unit 32 - Quality Systems in IT

This unit gives learners an understanding of the importance of the quality process as applied to IT-related systems development.

#### - Unit 33 - Data Analysis and Design

This unit provides learners with the knowledge and skills needed to understand, design, query and implement database systems.

#### - Unit 35 - Web Applications Development

This unit gives learners the ability to understand the concepts of web applications and apply these skills to develop web applications using server-side technologies.

### - Unit 36 - Internet Server Management

The unit enables learners to implement and manage secure internet technologies for networking systems.

#### - Unit 37 - Digital Image Creation and Development

The unit aims to develop skills and understanding in sourcing, creating, developing and managing digital images for specific purposes.





## EVERYONE HAS AN INNER GENIUS

We can help you find yours

Join our graduates and fast track your way to a successful career



AWARDED SILVER IN THE 2017 TEACHING EXCELLENCE FRAMEWORK





## Unit 38 – 3D Computer Modelling and Animation This unit develops learners' skills and understanding of the principles and practical applications of 3D modelling and animation.

### - Unit 39 - Computer Games Design and Development This unit gives an understanding of computer games

development as an underpinning technological concept in the fields of computer gaming and systems development.

#### - Unit 42 - Programming in .NET

This unit provides learners with the principles of programming using a .NET framework as an underpinning in the fields of programming and systems development.

#### - Unit 43 - Networking Infrastructure

The unit provides learners with an understanding of networking infrastructures and the directory based system that supports the addressing and management of networked system.

#### - Unit 44 - Local Area Networking Technologies

This unit provides learners with an understanding of Local Area Network (LAN) technologies and the delivery of a wide range of networked services across a LAN infrastructure.

#### - Unit 46 - Network Security

This unit grounds learners with the knowledge of how to manage, support and implement a secure network infrastructure for a commercial LAN or WAN environment.

#### - Unit 47 - IT Virtualisation

This unit provides learners with an understanding of virtualisation and the deployment of virtual servers.

#### - Unit 50 - Work-based Experience

This unit enables learners to experience the scope and depth of learning which may take place in a work-based context by planning, monitoring and evaluating the work experience.

#### ENTRY REQUIREMENTS

UCAS Points: 64

Alternatively, 'A Level' pass in an IT related subject or equivalent, or BTEC Level 3 Extended Diploma in IT. For applicants 21 and over, relevant industrial experience or vendor certification will be taken into account.

Learners are expected to be able to demonstrate English language comprehension at a level equivalent to IELTS 5.5 to be able to study BTEC Higher Nationals.





### EVERYONE HAS AN INNER GENIUS We can help you find yours

Join our graduates and fast track your way to a successful career



AWARDED SILVER IN THE 2017 TEACHING EXCELLENCE FRAMEWORK





#### **DELIVERY INFORMATION**

Units will be taught using a variety of teaching and learning styles: formal taught sessions, directed learning, tutor-led discussion and seminars, practical workshops with students working individually and/ or in groups according to need and their learning preference.

Class sessions will be complemented by independent, self-directed learning using a Virtual Learning Environment (Moodle).

Full-time study is sixteen hours per week, over two semesters, including tutorial time. Part-time study is eight hours per week, over two semesters, including tutorial time. It is expected that for every hour spent in the classroom, the equivalent is dedicated to independent, self-directed learning outside contact hours.

#### METHODS OF ASSESSMENT

Units will be assessed using a variety of methods: reports, seminars, presentations, practical workshops, academic essays, screencasts and portfolios of evidence. Alternative assessment methods may be used where appropriate.

#### CAREER OPPORTUNITIES AND PROGRESSION

After successful completion of the HND you could carry on to do one more year at university to gain a BSc Honours degree in Computing. Local providers are The University of Worcester and Birmingham City University. The course also provides you with the relevant vocational and technical skills to start work in software development, web development, network engineering or systems administration and we work with many local employers to help students gain employment after finishing the course.

#### **STAFF EXPERIENCE**

The Computing teaching team is made up of highly experienced vocational staff with several years' experience of teaching both software development and networking at undergraduate level. All team members have relevant teaching qualifications which arm them with the skills to share their first-hand knowledge and expertise with students.



