



**Are you itching to get stuck into all computing's latest theories, techniques and issues, but you're not sure if you qualify for university study? Studied over four years, we offer an integrated Foundation Year that is perfect to prepare you for success at undergraduate level. During your foundation year, you will complete six key modules that will prepare you with the required skills and knowledge to take on the full undergraduate degree in Computing. By the end of the programme, you'll be ready to take on immediate roles within the sector and have a specialist understanding in system design, development and web-based solutions.**

Modules are:

## Foundation Year (Level 0)

### Skills for Academic Study

This module will set you up with the underlying key study skills required to take on Higher Education, giving you the confidence to develop as an independent learner and to take responsibility for your own personal and professional development. You'll develop effective time management skills and learn different note taking techniques, knowing how to identify the most effective method for your studies. You will learn how to extract vital information from resource materials, as well as understand and explain how to avoid plagiarism through correct academic referencing. In addition, you will explore the use of IT applications, such as PowerPoint and Key Note to deliver presentations.

## The Digital Age

What are the components that make up our contemporary computer systems today? What is the difference between the Internet, the World-Wide Web and the Cloud? This module will help you to develop an understanding and a scientific, technically accurate, basic knowledge of the fundamental concepts of computer technology, to counter the inaccuracies generally displayed in the popular press. You will begin to understand the function of standard software and hardware components and identify and explain the basic components of a computer network. You will also be introduced to technical infrastructure and learn how to communicate technical information in language appropriate for target readers to understand.

## Using Numeracy, Data & IT

Through this module, you will be equipped with a range of mathematical skills to take on undergraduate study. You'll develop a solid knowledge base in numeracy, data and IT. You will be introduced to spreadsheets and learn to use some simple formula functions. You will be able to design numerical analyses and select appropriate ways to present your data that will help inform problem solving. It is recommended that you will have studied maths to GCSE level for this module.





## Computers in Society

This module will help you to develop an awareness of the contemporary developments in computing, and the impact of those developments in society in general. The module covers the developments in processor technology and questions where next, given that the physical limits of current processor technology are being reached. The impact on society in general will be explored, for example, how 'The Internet of Things' and 'Big Data' are impacting every day and business life. Ethical and green computing will also be considered, exploring the impact these issues may have on commercial organisations. You will also discuss the impact of social media, with a focus

on the impact this has had on how society operates and the security issues that it raises.

## Computing Fundamentals

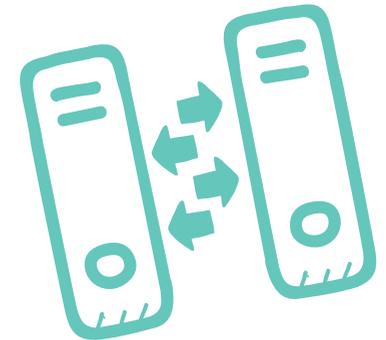
This module will help you to develop the fundamental basic knowledge and awareness of important computing concepts in preparation for further study in Computing. You will explore the ways in which data is represented within computer systems and address the fundamental operations that can be applied to it. You will develop the approaches to logical thinking that is required for programming and problem solving, as well as explore the basic programming techniques that can be used to help develop solutions to well-specified problems and manipulate various data types.

By the end of the module you will be able to demonstrate a sound understanding of programming languages, as well as the different units and notations used in computing.

## Research Skills

This module is designed to help you develop the research skills necessary for study in Higher Education. You will explore different note-taking techniques to record data from primary and secondary sources. You will also develop valuable team-working skills by working collaboratively to produce a short research project collecting primary data, providing you with the practical skills required for teamwork in the workplace. You will produce an individual report that draws meaningful conclusions from effective data

analysis and interpretation, demonstrating your ability to write to an acceptable academic standard of fluent written English. You will develop an ability to reflect upon your own practice and performance, understanding ways to set yourself realistic goals moving forward in your studies.





## Year 2 (Level 4)

### Professional Development

This module is all about you and the workplace. We'll help you brush up your communication skills, work out your learning style and explore the dynamics of working with other people. You'll thrash out strategies for problem solving, pinpoint the skills you've got (and the ones you can take with you into the world of work) and generally boost your personal and professional development.

### Computer Technology

This one's all about systems: hardware, software and the basics of networking. First up, you'll get your head round system design and start thinking about the tech that different users might need. Then it's time to get practical, with hands on projects that involve building and maintaining computer systems. Health and safety might get a bad press but it's vital - and you'll learn all about that too.



### Website Design

Time to get online now. We're talking website design, kicking off with all the things that make a great site; namely nifty design, making it accessible, working with different browsers and designing a page to suit the user. You'll learn about all the techniques and technologies used in the World Wide Web - as well as a fair few that are only just being thought of.

### Information Systems in Organisations

Information is power - and businesses know it. That's why this module will help you understand how you might get data, what data you need and what you want to get out of it.

### Database Design

Deeper into data now. It's all about how to build a smart database that's easy to store - and you can easily get your hands on all the information lurking inside (what the jargon fans call 'relational database design').

### Software Engineering

A module that's all about working out what your customer needs - and developing software to give it to them. Along the route, you'll come across different ways of doing this (programming and engineering approaches) and we'll also show you how to make sure everything you do is tip top quality.



## Year 3 (Level 5)

### Programming

Object oriented systems are at the heart of this module - and it's at the heart of most programming languages too. You'll get to grips with class design, using inheritance and aggregation techniques. Then you'll test your skills by developing small applications.



### Systems Analysis and Design

Who knew you could use the term lifecycle in relation to computing? When you tick this module off, you'll have learned how to take a critical look at systems and reviewed different lifecycle models. Analysis and design techniques coupled with a sprinkling of fact-finding methods such as focus groups, interviews and questionnaires will help you get to grips with who your users are and what they need.

### Database Implementation

You made a start on this subject in the first year - now you're back for a level up. As well as the thinking behind those relational databases, you'll master practical skills too: how to design, programme and develop databases. And how to put them into practice in a business.

### Data Communications

So you've got all that data, you've built an impressive database for it - now how do you get that information to where it needs to be? Welcome to data communications. You'll find out all about the ways data is moved around a network.

### Quality Systems in IT

Have you seen codes such as ISO 13000 bandied about? This is where you'll find out all about them. ISO stands for the International Standards Organisation and it sets quality standards. You'll find out what can go wrong and how to deliver a gold standard.

### Dynamic Website Development

You learned website basics in the first year and now you're going to step up to the next rung on the ladder. You'll cover more advanced tech and ideas, dynamic content and how databases work with web-based systems. One thing doesn't change though: the user is still at the heart of everything you do. You'll know you've finished this module when you can create your own server side website.



## Year 4 (Level 6)

### Current Trends in Networking

We can't tell you exactly what you'll study because it's all about real life, leading edge technologies. You'll be studying the very latest, delving into why that new tech is better than the old one.

### Management in IT

By this stage, you'll be thinking pretty seriously about your next steps. So we spend time with you looking at what it takes to be a technology or IT manager. You'll see how you'd fit into a business and how you'd manage your own department.

### Computer Systems Security

Cryptographics is a great word. It's also the basis for the all-important computer security. This module will look at cybercrime, the law and those weak spots where systems and people might be vulnerable to attack.

### e-Commerce Systems

You'll be designing and building your own e-commerce system for this one. An in-depth look behind the digital shop front, including client-server computing, mark up languages, client side scripting, server side scripting.

### Computing Project

This last big project means you can really get your teeth into the bits of the course that you really love. Whether it's an experiment, an investigation or a practical piece of work is entirely up to you. You will need to back it up with academic work and tech and we'll encourage you to do surveys and interviews to come up with your own data. Don't worry - one of your tutors will always be there to keep you on track.

**"This programme is very useful to me. It has helped me to sharpen my skills and enhance my potential. The programme is equally good for self-development. It has increased my way of reasoning and thinking."**

**- Mary Ogunbolu  
Computing student**

# BSC (HONS) COMPUTING (4 YEARS)



## Course duration and hours of study

This course will take 4 years to complete with the integrated foundation year. Your course will be delivered through a blend of online and face-to-face teaching, compressing the amount of days you need to be at the study centre.

You can find out more information on the course page, visit [www.arden.ac.uk](http://www.arden.ac.uk). Alternatively, please call our admissions team on:

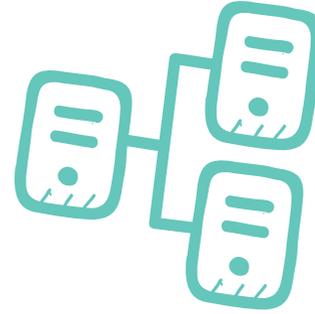
0208 003 6196 for more details.

## Entry requirements

The 4 year route with integrated foundation year is perfect for those with a desire to return to education or seeking to develop key study skills in their first year.

Candidates are required to submit a personal statement (of between 350-550 words) or interview demonstrating an ability to study the programme, taking into account:

- their motivation for undertaking the programme
- relevant work experience
- prior qualifications
- references



BLENDING  
LEARNING  
UNDERGRADUATE  
COURSE  
UK ONLY

## How to apply

Visit: [www.arden.ac.uk](http://www.arden.ac.uk)

Email: [contactus@arden.ac.uk](mailto:contactus@arden.ac.uk)

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