

## Digital Higher and Degree Apprenticeships

### Programme in development<sup>1</sup>

## Programme Outline

### Overview

Degree Apprenticeships help employers tailor the skills of fresh, emerging talent to their business need and offer young people opportunities to pursue academic learning alongside real-life work experience (Tech Partnership 2016).

The Computing Department at Sheffield Hallam University has a recognised reputation for employer-centred education and has long-established relationships with major blue-chip providers such as; Cisco, Microsoft, Oracle, SAS, SAP and Sony.

Sheffield Hallam University invites you to engage with the design of our Apprenticeship products and potentially commit to recruiting or enrolling existing staff onto a Digital Technologies Apprenticeship in September 2016.

### Key drivers

- 78% of organisations believe that a skills shortage in digital expertise is one of their main barriers to progress
- Over 12 million people, and a million small businesses in the UK do not have the skills to prosper in the digital era (Go.On UK)
- In the most recent survey of British firms by the Institution of Engineering and Technology (IET), over half reported that they could not find the employees they were looking for and 59% said that the shortage would be “a threat to their business in the UK”
- The 2015 Employer Skills Survey report from the UK Commission for Employment and Skills found that the skills most commonly lacking amongst professionals are specialist skills or knowledge, and advanced or specialist IT skills as well as complex problem solving skills
- The Digitally based BSc (Honours) degree forms part of the Degree Apprenticeship that was launched in September 2015. Designed by employers, it targets a range of graduate-level tech roles including; Cyber Security Analyst, Data Analyst, IT Consultant, Business Analyst, Network Engineering and Software Engineering
- Introduction of the Apprenticeship Levy in April 2017 for all large organisations

### Benefits for employers

A Digital Degree Apprenticeship with Sheffield Hallam University will foster the skills and creativity employers need from employees, and will encourage loyalty to the organisation, providing a base to drive it onto the next level. The Degree Apprenticeship offers:

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<sup>1</sup> Please note we are in the process of consorting with partners and developing the programme, therefore this apprenticeship and degree are subject to validation.

- immediate access to a low cost resource; even in their first year, learners are able to offer a cost-effective contribution to projects via coding, app development etc.
- the opportunity to tailor the skills of the learner around the company requirements, products and solutions
- the chance to attract and retain the best young talent, supporting the youth employment agenda
- work-ready graduates who truly understand your business and have learned from other organisations and sectors, bringing fresh perspectives and ideas
- a return on investment through accelerated development and increased commitment
- enhanced learning and development strategies
- training tailored to a wide spectrum of industries and sectors

## How we can help you

- A programme of study designed equally around three core aspects: core computing skills, specialist knowledge and work-based learning
- More than a third of the programme is focussed upon activity undertaken within the company
- Expertise in areas such as; software engineering, networking and cyber security with industry-leading tools and applications
- Professionalism within the industry context is emphasised throughout with strong links to the British Computer Society
- Learners exposed to multiple programming languages, tools and technologies that are current industry standard, in addition to the fundamental underlying principles

We want to hear your views on the most valued skills and the ways in which we might deliver the programme to meet your business needs.

## Award

BSc Honours Degree - titles to be confirmed.

## Duration

The course is delivered over a 3 year duration.

## Delivery method

We are keen to explore different delivery models and ideally find an approach that can meet the business requirements of regional and national employers.

- Model 1: "Day release" attendance. Your employees would attend university one day a week during term time, and benefit from access to on-line learning resources and support
- Model 2: Block Attendance. Your employee would attend the University in blocks (for example one week at a time, 4- 6 times a year), with access to on-line learning resources and email support in between blocks
- Model 3: Hybrid Attendance. Your employee would attend some intensive blocks of learning at University, typically at the start and end of each level of study, and in between those blocks attendance would be more like intermittent (planned) day release but with some periods where learning would be work based and self-managed by students with access to on-line learning resources and support

Ultimately we will listen to your views and provide a further update on a preferred delivery method and likely start date.

## Course description

The course is likely to entail a common first year to build fundamental skills and knowledge and offer Apprentices a choice of specialism to build into their later study and career progression.

In years two and three optional modules will help to develop Apprentices' specialisms and Work Based Learning modules will encourage a greater focus on the specialist areas of work in your business. Only one of these specialisms is applicable for each apprentice and should be decided based on the employment role within the workplace.

The programme culminates in a synoptic assessment based on a predetermined workplace project focussed on the learners chosen specialism.

Proposed module titles:

YEAR 1	Information Systems	Programming Fundamentals	Computer Systems & Architectures	Introduction to Computer & Information Security	<i>Reflective &amp; Personal Development Skills</i>	<i>Work-based Review</i>
YEAR 2	Database Systems, Admin., & Security	Route Elective 1	Route Elective 2	Project-based Learning/Group Software Development	<i>Professional Review &amp; Future Planning</i>	<i>Work-based Investigation</i>
YEAR 3	Management of IT Projects	Route Elective 3	<i>Reflective Practice for Professional Development</i>	<i>Synoptic project &amp; Presentation</i>		

Route	Elective 1 (L5)	Elective 2 (L5)	Elective 3 (L6)
Networks	Network Services & admin.	Web Apps Development	Advanced network design
Security	Network Services & admin.	Ethical Hacking	Information security management
Web-systems design	Effective Design for Multimedia	Web Apps Development	Advanced web applications
Business Info Systems	Effective Design for Multimedia	Business Modelling	Business appraisal and infopreneurship
Data Science	Programming & Data Analysis	Business Modelling	Data Mining with Business Applications

Sheffield Hallam University is consulting on a series of possible routes to meet some or all of the degree standard specialisms listed:

- Software Engineer
- IT Consultant
- IT Business Analyst
- Cyber Security Analyst
- Data Analyst
- Network Engineer

## Assessment for the degree

The Sheffield Hallam University Degree award will incorporate a mix of innovative and traditional assessment types to monitor and reward progress. Assessment for learning and a thread of work-

based modules will ensure that learners are able to integrate academic learning and on-the-job training.

### **Professional recognition**

A number of our current courses are accredited by the British Computer Society (BCS). It is anticipated that the Degree Apprenticeship will also receive this accreditation.

### **End-point assessment**

Unlike other Degree Standards, the Digital Apprenticeship Standard has an end-point assessment of the Apprentice that is conducted by the University (rather than an independent third party). This will comply with the assessment plan for each Degree Standard we deliver. We will respond to your views when designing our products to meet the assessment plan requirements for each Apprenticeship pathway.

### **Options for larger employers**

Where an organisation has a significant number of learners, 15 or more, Sheffield Hallam University can work with you to co-create tailored content to meet individual business needs.

### **Entry requirements**

We envisage that the programme will be suitable both for recruiting and employing school leavers into the business and for developing existing aspiring staff who do not have a relevant digital degree.

For new recruits, the usual entry requirements are 280 UCAS points, or successful completion of a relevant level 3 apprenticeship.

For those already in employment the apprenticeship provides access to development opportunities for applicants who may already have practical experience but wish to improve their theoretical understanding, want to develop their skills further and obtain an academic qualification and professional recognition.

### **Fees**

Full time fees are typically £9,000 (indicative) per year per learner, charged pro rata for part time study, however Government funding is currently available to cover up to two-thirds of training costs (funding rules apply – visit the Skills Funding Agency website for more details:

<https://www.gov.uk/guidance/sfa-funding-rules>).

In addition there are three available employer incentive payments

- for 16-18 year old learners
- for employers with fewer than 50 employees
- for programme completions

### **Contact**

For more information please contact Bob Drake on 0114 225 6833 or email [r.drake@shu.ac.uk](mailto:r.drake@shu.ac.uk).