Apprenticeship Standard Level 4 Software Developer – Curriculum Delivery Schedule

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| **Boot Camp** |
| **Week 1 – aim is to give students a basic level of coding knowledge and develop their employability skills** |
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| Boot Camp Aims:* College Induction
* Boot Camp Introduction
* Initial Assessment
* Coding Introduction

Induction to the Sheffield College and an introduction to the Boot Camp delivery programme. An initial diagnostic assessment of each student will be undertaken to assess for any additional learning support, this will be followed by an introduction to coding to assess the prior knowledge of each student. | Boot Camp Aims:* Coding Skills Development
* Communication
* Working in Teams
* Peer Assessment

Students will be put into small groups of mixed coding ability and work on a coding task and develop team working skills. The students will develop skills in writing simple programs, data structures, introduction to code syntax and using input process output techniques. | Boot Camp Aims:* Coding Skills Development
* Communication
* Working in Teams
* Peer Assessment

Students will be put into small groups of mixed coding ability and work on a coding task and develop team working skills. The students will develop skills in writing simple programs, data structures, introduction to code syntax and using input process output techniques. | Boot camp Aims:* Coding Skills Development
* Communication
* Working in Teams
* Peer Assessment

Students will be put into small groups of mixed coding ability and work on a coding task and develop team working skills. This will be followed by each group peer assessing the coding task that has been completed by each group | Boot Camp Aims:* Communication
* Working independently
* Assessment

 Students will be given a project to assess their independent code writing understanding followed by some peer marking to consolidate learning. |
| **Week 2 – aim is to develop the students programming skills, problem solving skills and give the students the chance to work with employers on a project** |
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| Boot Camp Aims:* Review of week 1 learning
* Introduction to the project using a case study
* Implementation of project teams
* Project Planning
 | Boot Camp Aims:* Project Design
* Project Time Management
* Presentation of Project Plan
 | Boot Camp Aims:* Project Feedback Analysis
* Project Implementation - Coding

Coding will be broken down into modules so each student has the opportunity to code | Boot Camp Aims:* Project Implementation – Coding
* Project Implementation – De-bugging and testing
* Project Evaluation
 | Boot Camp Aims:* Presentation Preparation
* Presentation to Employers
* Awards Ceremony
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| **Year 1 – Delivery of the knowledge unit Software Development Methodologies will be an initial two week block followed by one week blocks spaced throughout the year** |
| Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 |
| **Generic Coding Workshop:**The delivery of an intense coding workshop that will develop the coding skills to prepare the apprentice for their introduction to employment in the Digital IndustryFor Example: Visual Basic.net, C++, Java Script and PHP | **Generic Coding Workshop:**The delivery of an intense coding workshop that will develop the coding skills to prepare the apprentice for their introduction to employment in the Digital IndustryFor Example: Visual Basic.net, C++, Java Script and PHP | **Learning Outcome 1: Understand the Software Development lifecycle**Topics:The role and scope of software development and its relationship to other associated disciplinesThe importance of following a procedural/staged lifecycle | **Learning Outcome 2: Understand the similarities and differences between software development methodologies**Topics:Software development methodologies, applications, advantages and disadvantages**Learning Outcome 3: Understand how to respond appropriately to the business environment and business issues related to software development**Topics:The business environment related to software developmentThe business environment and business issues related to software development | **Learning Outcome 4: Understand why teams must work effectively to produce software**Topics:Roles and responsibilities within the software development and implementation lifecycleThe importance of working as an effective member of a development team | **Assessment Preparation and Completion:**The apprentice will have assessment support in preparation for the Software Development Methodologies Examination. The examination will take place at the end of the week after a series of revision sessions, mock examination tests and feedback. |
| Throughout the year the apprentice and their mentor will have a series of support visits to develop their Portfolio of Evidence and in preparation for the End Point Assessment |
| Initial Review | Progress Review | Progress Review | Progress Review | Progress Review | Progress Review | Progress Review | Progress Review | Progress Review | Progress Review |
| Weeks 1 - 4 | Weeks 5 - 8 | Weeks 9 - 12 | Weeks 13 - 16 | Weeks 17 - 22 | Weeks 23 - 28 | Weeks 29 - 34 | Weeks 35 - 40 | Weeks 41 - 46 | Weeks 47 - 52 |

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| **Year 2 – Delivery of the Vendor Qualification (Oracle Java Certified)** |
| Week 1 | Week 2 | Week 3 | Week 4 |
| Preparation for Java:The apprentices will spend one week at The Sheffield College to prepare them for the completion of an Oracle Java Certification to be an Associate Level Oracle Standard Addition Programmer. | Oracle Java Fundamentals Training:* Use Java Programming Language
* Use Decision and Looping Constructs
* Understand Basic Object Oriented Concepts
* Use and Manipulate Object References
* Use the New SE 8 Java Time Format Package
* Specify a Data Modification
 | Oracle Java SE 8 Programming Training:* Create Java technology Applications
* Develop Object Oriented Skills
* Identify Good Practice in the Use of the Language
* Store and manipulate Data
* Manipulate Files and Directories
* Connect to Databases using Standard SQL Queries
* Create High-Performance Multi-Thread Applications
 | Exam Preparation and Exam Completion:Apprentices to receive exam technique and preparation for the Oracle Certified Professional Java SE 8 Programmer Exam.Exam completion would be designed at the end of this week. |
| Throughout the year the apprentice and their mentor will have a series of support visits to develop their Portfolio of Evidence and in preparation for the End Point Assessment |
| Progress Review | Progress Review | Progress Review | Progress Review | Progress Review | Progress Review | Progress Review | Progress Review | Progress Review | Progress Review |
| Weeks 1 - 4 | Weeks 5 - 8 | Weeks 9 -12 | Weeks 13 - 16 | Weeks 17 - 22 | Weeks 23 - 28 | Weeks 29 - 34 | Weeks 35 - 40 | Weeks 41 - 46 | Weeks 47 - 52 |

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| **End Point Assessment** |
| **Health and Safety Induction** | **Evidence Portfolio** | **Project** | **Employer Reference** | **Technical Interview** | **Assessment Organisation Moderation** | **Assessment of Grading Criteria** | **Final Grade Decision** | **Professional Body Recognition** |
| External Assessor has completed all necessary H&S site inductions and training | The apprentice must complete an Evidence Portfolio within the duration of their training that consistently demonstrates how they have met the knowledge, skills and behaviours set out in the Standard | The Apprentice will need to complete a standardised scenario based project that is required to be business related, but must be completed over a one week period away from the day to day workplace | Provides the employers perspective on how the apprentice has performed in the workplace and how they have applied their knowledge, competencies and behaviours | An independent technical expert will conduct an interview with the apprentice and is based on their evidence portfolio. It will provide further validation and accuracy to the assessment of their knowledge, competency and behaviour | Assessment organisations will undertake a moderation procedure of independent examination of the technical expert decision on a risk sampling basis. The EQA is managed by the Tech Partnership and OFQUAL | Pass: all elements must meet the minimum requirement for qualityMerit: part of the elements within the Standard are assessed as significantly above the level of quality expectedDistinction: All elements within the Standard are assessed as significantly above the level of quality expected | An independent External Assessor will combine all moderated grades to determine the overall apprenticeship grade in line with the grading criteria provided in the EPA Plan | The Register of IT Technicians provides independent recognition of achieving the Standard. A place on the register provides recognition of their competency in applying technical skills in a business environment, whilst signing up to a professional code of conduct |
| Progress Review 1 | Progress Review 2 | Progress Review 3 | Progress Review 4 |
| Weeks 1 - 3 | Weeks 4 - 6 | Weeks 7 - 9 | Weeks 10 - 12 |

**More information**

To find out more about the opportunities and financing of apprenticeships and to discuss your particular requirements, please email employer@sheffcol.ac.uk or call 0114 260 2600 to speak to one of our friendly employer advisors.

**Why choose The Sheffield College?**

As one of the region’s largest providers of apprenticeships, The Sheffield College is more than just your local provider; we deliver the dedicated support you need to source, train and get the best out of your apprentice. We appreciate how difficult and time consuming it can be to recruit staff. That’s why, when you recruit an apprentice with us, our dedicated apprenticeship recruitment service, Job Connect, will advertise the vacancy, engage your candidates and even pre-screen them to make the process as easy as possible for you.

We help you get the best deal by finding the right funding and we handle the paperwork to make the process of arranging an apprenticeship training programme as smooth as possible. Our employer partnership team, apprenticeship tutors and assessment staff are experts, and we invest time and money in training and upskilling them regularly so their knowledge is up-to-date and industry standard.