






# A GUIDE TO SOFTWARE CAREER DEVELOPMENT

Looking to improve your knowledge and skills to progress further in the Software Development field?

Unsure of the professional development options available?

Check out this handy guide that includes example courses and certifications that are available in Scotland (as of June 2020).

	Technology Skills	Courses	Certifications
 <p><b>Software Engineer</b></p>	<ul style="list-style-type: none"> <li>• Cloud Platforms: AWS, Azure, GCP</li> <li>• Development Environment Software: Eclipse, Oracle NetBeans IDE, Microsoft Visual Studio</li> <li>• Object or Component Oriented Software</li> <li>• Software Development Life Cycle (SDLC)</li> <li>• Multiple languages e.g. C++, C#, Golang, Java, Python</li> </ul>	<ul style="list-style-type: none"> <li>• CodeClan – Professional Software Development</li> <li>• BCS Agile Foundation Certificate</li> <li>• Code Academy</li> <li>• Free Code Camp</li> <li>• General Assembly – Software Engineering Immersive</li> </ul>	<ul style="list-style-type: none"> <li>• AWS Certified Developer – Associate</li> <li>• Microsoft Certified: Azure Developer Associate</li> <li>• Oracle Java SE 8 Programmer</li> <li>• Scrum Alliance: Certified Scrum Developer</li> <li>• Unity Certified Programmer</li> </ul>
 <p><b>DevOps Engineer</b></p>	<ul style="list-style-type: none"> <li>• Cloud Platforms: AWS, Azure, GCP</li> <li>• Development Environment Software: Eclipse, Oracle NetBeans IDE, Microsoft Visual Studio</li> <li>• Operating Systems Software: Windows, Linux</li> <li>• Multiple languages e.g. C#, Bash, Golang, Java, PowerShell, Python, Ruby</li> </ul>	<ul style="list-style-type: none"> <li>• BCS Foundation Level Certificate in DevOps</li> <li>• Free Code Camp</li> <li>• QA – DevOps Practitioner</li> <li>• Udacity</li> </ul>	<ul style="list-style-type: none"> <li>• AWS Certified DevOps Engineer – Professional</li> <li>• CompTIA Linux+</li> <li>• GCP – Professional Cloud DevOps Engineer</li> <li>• Microsoft Certified: Azure DevOps Engineer Expert</li> <li>• Red Hat Certified Engineer (RHCE)</li> </ul>
 <p><b>Web Developer</b></p>	<ul style="list-style-type: none"> <li>• Cloud Platforms: AWS, Azure, GCP</li> <li>• Operating Systems Software: Windows, Linux</li> <li>• Web Platform Development Software: Atom, Notepad++, Sublime Text</li> <li>• Multiple languages e.g. C#, CSS, HTML, JavaScript, MySQL, PHP</li> </ul>	<ul style="list-style-type: none"> <li>• CodeClan – Full-Stack Web Development</li> <li>• Code Academy</li> <li>• Free Code Camp</li> <li>• General Assembly – Front-End Web Development</li> <li>• The Odin Project</li> <li>• W3Schools</li> </ul>	<ul style="list-style-type: none"> <li>• AWS Certified Cloud Practitioner</li> <li>• CompTIA Linux+</li> <li>• Microsoft Certified: Azure Fundamentals</li> </ul>
 <p><b>Mobile Apps Developer</b></p>	<ul style="list-style-type: none"> <li>• Development Environment Software: Android Studio, Apple Xcode</li> <li>• Multiple languages e.g. JavaScript, Java, Kotlin, Swift</li> </ul>	<ul style="list-style-type: none"> <li>• CodeClan – Professional Software Development</li> <li>• Android – Developer Training</li> <li>• Code Academy</li> <li>• Free Code Camp</li> </ul>	<ul style="list-style-type: none"> <li>• Apple – App Development with Swift</li> <li>• Google Certified Mobile Web Specialist</li> <li>• Oracle Java SE 8 Programmer</li> <li>• Scrum Alliance: Certified Scrum Developer</li> </ul>
 <p><b>Games Developer</b></p>	<ul style="list-style-type: none"> <li>• Development Environment Software: Eclipse, Oracle NetBeans IDE, Microsoft Visual Studio</li> <li>• Graphical User Interface Development Software</li> <li>• Graphics Imaging Software: Adobe Photoshop, GIMP</li> <li>• Video Creation and Editing Software: Adobe Premiere, TechSmith Camtasia</li> <li>• Multiple languages e.g. C++, C#, Java, Python, Unreal Script</li> </ul>	<ul style="list-style-type: none"> <li>• Code Academy</li> <li>• Free Code Camp</li> <li>• Software Academy – Unreal Engine 4 training</li> </ul>	<ul style="list-style-type: none"> <li>• Oracle Java SE 8 Programmer</li> <li>• Scrum Alliance: Certified Scrum Developer</li> <li>• Unity Expert Gameplay Programmer</li> </ul>
 <p><b>UX Designer</b></p>	<ul style="list-style-type: none"> <li>• Development Environment Software: Eclipse, Oracle NetBeans IDE, Microsoft Visual Studio</li> <li>• Graphical User Interface Development Software</li> <li>• Graphics Imaging Software: Adobe Photoshop, GIMP</li> <li>• Video Creation and Editing Software: Adobe Premiere, TechSmith Camtasia</li> <li>• Multiple languages e.g. C#, CSS, HTML, Java, JavaScript, PHP, Python</li> </ul>	<ul style="list-style-type: none"> <li>• CodeClan – UX Design Fundamentals</li> <li>• Code Academy</li> <li>• General Assembly – User Experience Design Immersive</li> <li>• Free Code Camp</li> <li>• UX Design Institute – Professional Diploma in UX Design</li> </ul>	<ul style="list-style-type: none"> <li>• Adobe Certified Expert</li> <li>• BCS Foundation Certificate in User Experience</li> </ul>
 <p><b>Software Architect</b></p>	<ul style="list-style-type: none"> <li>• Cloud Platforms: AWS, Azure, GCP</li> <li>• Development Environment Software: Eclipse, Oracle NetBeans IDE, Microsoft Visual Studio</li> <li>• Systems Architecture</li> <li>• Multiple languages e.g. C#, Bash, Golang, Java, PowerShell, Python, Ruby</li> </ul>	<ul style="list-style-type: none"> <li>• CodeClan – Professional Software Development</li> <li>• CodeClan – Managing Growth with Agile</li> <li>• Code Academy</li> <li>• Free Code Camp</li> <li>• Udacity</li> </ul>	<ul style="list-style-type: none"> <li>• AWS Certified Solutions Architect – Professional</li> <li>• GCP – Professional Cloud Architect</li> <li>• Microsoft Certified: Azure Solutions Architect Expert</li> <li>• Scrum Alliance – Certified Scrum Master</li> </ul>
 <p><b>Software Product Manager</b></p>	<ul style="list-style-type: none"> <li>• Cloud Platforms: AWS, Azure, GCP</li> <li>• Development Environment Software: Eclipse, Oracle NetBeans IDE, Microsoft Visual Studio</li> <li>• Project Management Software: Microsoft Project, Trello</li> <li>• Software Development Life Cycle</li> </ul>	<ul style="list-style-type: none"> <li>• CodeClan – Managing Growth with Agile</li> <li>• CodeClan – Understand how Software Applications Work</li> <li>• General Assembly – Product Management</li> <li>• QA – Programming Foundations</li> <li>• Udacity – Business Pathway</li> </ul>	<ul style="list-style-type: none"> <li>• AWS Certified Cloud Practitioner</li> <li>• Axelos PRINCE2 Practitioner</li> <li>• Microsoft Certified: Azure Fundamentals</li> <li>• CompTIA Cloud Essentials</li> <li>• Scrum Alliance – Certified Scrum Product Owner</li> </ul>
 <p><b>Software Tester</b></p>	<ul style="list-style-type: none"> <li>• Testing Tools: Xray, Testpad</li> <li>• Development Environment Software: Eclipse, Oracle NetBeans IDE, Microsoft Visual Studio</li> <li>• Operating Systems Software: Windows, Linux</li> <li>• Multiple languages e.g. C#, Bash, Golang, Java, PowerShell, Python, Ruby</li> </ul>	<ul style="list-style-type: none"> <li>• CodeClan – Professional Software Development</li> <li>• Code Academy</li> <li>• Free Code Camp</li> </ul>	<ul style="list-style-type: none"> <li>• ISTQB Certified Tester Advanced Level – Technical Test Analyst</li> <li>• ISTQB Certified Tester Advanced Level – Test Automation Engineer</li> <li>• Scrum Alliance – Certified Scrum Professional</li> </ul>
 <p><b>Software Support Technician</b></p>	<ul style="list-style-type: none"> <li>• Development Environment Software: Eclipse, Oracle NetBeans IDE, Microsoft Visual Studio</li> <li>• IT Ticketing Systems</li> <li>• Remote Access Software</li> <li>• Systems Architecture</li> <li>• Multiple languages e.g. C#, Bash, Golang, Java, PowerShell, Python, Ruby</li> </ul>	<ul style="list-style-type: none"> <li>• CodeClan – Professional Software Development</li> <li>• Google / Coursera Google IT Professional Certificates</li> <li>• Code Academy</li> <li>• Free Code Camp</li> </ul>	<ul style="list-style-type: none"> <li>• AWS Certified Cloud Practitioner</li> <li>• Axelos ITIL Foundation</li> <li>• Cisco Certified Network Associate (CCNA)</li> <li>• CompTIA A+</li> <li>• Microsoft Certified: Azure Fundamentals</li> </ul>



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