Code Division

Code Division

EXPLORE
LEARN
INNOVATE

SQA Approved Centre

WE'RE A SOCIAL ENTERPRISE
socialenterprise.scot

Agile Learning Centre

▶ **codedivision.co.uk**

Contents

"75 million jobs expected to be displaced due to automation and technological integration in the coming years, worries around unequal opportunity, large-scale unemployment and widening income inequality are rising. The transformation will also create demand for an estimated 133 million new jobs with vast new opportunities for fulfilling people's potential and aspirations"

WEFORUM: RESKILLING REVOLUTION (Jan 2020)

Code Division are levelling the playing field in the Tech Industry. We are reducing inequality through Digital Skills education.

codedivision.co.uk

Courses focus on four key digital areas:

Software Development

Software development skills are in constant demand. Everything from desk top, mobile and web applications needs programming languages such as Java, SQL, Javascript and Python. As society moved towards remote working understanding agile working and utilising collaboration tools are essential for a successful career in the digital sector.

Data Science

It has never been so important to harness the power of data to allow us to understand all aspects of business. As digital transformation advances, the data generated and stored will continue to increase. Employees who are able to extract, analyse and translate data into useful information will be essential to the success of any organisation.

Business Technology

In a time of rapid technological and social change, businesses need highly trained, adaptable and creative individuals to keep pace and stay innovative. Code Division will equip learners with the necessary skills to unlock the untapped potential in a wide range of contemporary business applications.

Cyber Security

Cyber resilience has become a top priority in every organisation with the increase in remote working. Code Division can deliver courses on anything from cyber awareness to intrusion detection and vulnerability testing. Cyber resilience helps company maintain a trusted brand and our courses align with the Government Cyber Resilience Strategy.

Code Division

codedivision.co.uk

Recognising the dramatic digital shift in society Code Division are rethinking the role of technology in education.

Designing courses with basic online content can lead to disengagement and passive learning. Code Division design interactive courses to engage and empower learners, through active, flexible and self-paced learning.

Code Division courses are delivered fully online, utilising work based learning, real world projects, industry insights, webinars, workshops and a variety of interactive materials. Learners will be supported and gain insights from dedicated tutors, technologists, work based assessors and industry experts.

As a social enterprise Code Division aims to tackle economic and social barriers for our learners. Code Division aims to provide courses free at the point of access, supplying the software and equipment needed to access the courses. Code Division works with third sector partners to offer additional classes, workshops and opportunities covering well-being, enterprise and support for mental health.

Approaches to learning

Code
Divis/on

Community & school courses

£
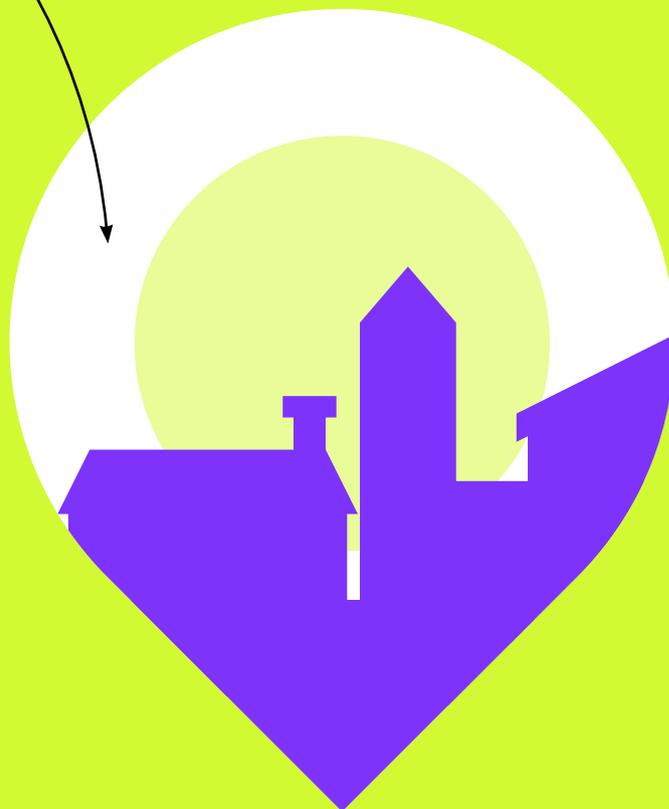
Industry course profit

Money generated from Code Division industry courses help support our work in the community and schools. In turn these courses provide our learners with the necessary work ready skills to progress into employment.

Our model

Industry

Code Division courses are industry driven, and will collaborate with you to meet your organisations training needs. Code Division provide flexible high quality up skilling and reskilling courses in: data analysis, cyber resilience, business applications and software development.

Skills

Schools

Our industry driven courses are designed to prepare young people for work and provide skills pathways into a wide variety of digital roles. Our courses focus on work based learning aligned to industry competency frameworks, alongside embedded SQA accreditation.

Community

Code Division, as a social enterprise, are committed to delivering courses which will empower communities to drive change from the ground up. Code Division strives to help inspire and innovate learners to reach their potential by bringing digital opportunities to all communities.

Code Division

codedivision.co.uk

Industry course examples

> *"As the Fourth Industrial Revolution impacts skills, tasks and jobs, there is growing concern that both job displacement and talent shortages will impact business dynamism and societal cohesion. On the one hand, large parts of the labour market will be impacted by intelligent systems and automation, a transformation we can already observe today. On the other hand, technological integration will change the business models of all industries, giving rise to a number of emerging jobs."*
>
> WORLD ECONOMIC FORUM: TOWARDS A RESKILLING REVOLUTION (JAN 2019)

Cyber Resilience (Introduction)
SQA Accreditation: Level 7
80 hours

As businesses move from the physical to the digital in response to the Covid-19 pandemic, we have seen an increase in remote working, video conferencing and use of the cloud. There has never been a greater need for businesses to improve their cyber resilience, to use technology securely and remain proactive in preventing cybercrime.

This course covers: backing up data, using data security tools, protection from malware, avoiding phishing attacks, anti-virus protection, controlling access to systems, network security, risk and incident management and disaster recovery.

Cyber Resilience (Advanced)
SQA Accreditation: PDA in Cyber Resilience (Level 8)
160 hours

The PDA qualifications in Cyber Resilience aim to provide knowledge and skills in cyber security in order to increase awareness, develop deeper knowledge and learn appropriate skills within the discipline. This course embeds the qualification within a framework that promotes practical skills and competencies. Suitable for all learners who wish to develop their cyber security awareness in support of their contribution to strengthening the cyber resilience of their employer organisation.

This course covers: Threat Analysis, Cyber Security Controls, Intrusion Detection, Analysis and Response, Intrusion Prevention Systems, Penetration Testing, Ethical Hacking, Cryptography, Software Security, Application Security.

Industry courses

Code Division

codedivision.co.uk

Data Analysis and Business Applications (Introduction)
SQA Accreditation: Level 7
80 hours

In this course you will learn how to utilise Excel to unlock the power of data analytics. The course will also cover quality and bias in data analysis and you will work with data sets relevant to your own work roles. There will also be a focus on how to 'read' and make sense of the information contained in data visualisations as a tool to communicate to others. The course will cover techniques such as; Summaries, Infographics, Dashboards and Storytelling.

Data Analysis and Programming (Advanced)
SQA Accreditation: Level 8
80 hours

This course will focus on using Python for data analysis. Emphasis is placed on the use of modularity, using functions, libraries and code reuse. The learner will also discover the importance of securing data, including the tools and functions used for managing digital authentication (secret management). They will also write programs that reads data from external sources, data cleaning algorithms, data wrangling, statistical analyses and creating visualisations.

Data Science Courses
SQA Accreditation: PDA in Data Science (Level 8)
160 hours

In this course learners get the opportunity to apply the principles of data science to solve real world business problems. It can be delivered with an emphasis on programming applications or business applications. The course covers data extraction, data modelling, star schema, using dimension and fact tables, data quality, data bias and how to automate transformations. Learners will also be taught how to analyse data in order to provide business intelligence and create advanced data visualisations including: charts, dashboards and storytelling. The course will culminate in a business project with the emphasis on collaboration, team working and project management skills using contemporary collaboration and project management tools.

Java Programming (Introduction)
SQA Accreditation: Level 8
80 hours

This course will focus on how organisations utilise a programming language like java to build applications. Emphasis will be placed on the use of OO methodology, modularity, methods, libraries and code reuse. The course will include: Objects and classes, data types, data structures, selection, iteration, parameter passing, constructors, inheritance, polymorphism, sorting and searching algorithms and testing.

Front End Development Programming
SQA Accreditation: Level 8
80 hours

This course is an introduction to full stack development. The course will cover the core understanding in programming and computational thinking. It will cover designing structure and design of web pages using HTML and CSS as well as utilising React framework, Node JS and My SQL. The course will focus on understanding the principles of javascript as well as server side scripting. The learner will also use industry relevant IDE's, collaboration tools and GIT Hub as well as agile methodologies and test driven development. Learners will develop an e-portfolio of their coursework to be assessed by work-based assessors.

Full Stack Development Course
SQA Accreditation: PDA in Software Development (Level 8)
160 hours

In this course learners will gain an understanding of full stack development within software development. They will explore differing industry approaches and methodologies; Agile, Kanban, Waterfall, Test Driven Development and User Centred Design alongside different collaboration and project management tools. The course will cover approaches involved in both OO and user centred analysis and design and the design principles behind both MVC and iterative development. The learners will learn to code in both Java and javascript and be introduced to both PHP and SQL. They will also be collaborate through pair programming and code reviews culminating in a group project to build and test a finished application.

Code Division

codedivision.co.uk

Business Applications (Excel)
SQA Accreditation: Level 8
80 hours

This course was developed to focus on utilising MS excel and its different tools to its full potential. The learner will discover how to develop Excel applications to perform a wide variety of business tasks. Including: Formulas Pivots tables, data management, project management tools, statistical analysis, forecasting tools, financial management reporting tools

Business Technology Course
SQA Accreditation: PDA Information Technology Level 8
160 hours

This updated course embeds the PDA in Information Technology and delivers the essential skills and knowledge needed for a range of roles within technology. There is a particular emphasis on remote working and the different skills and technologies needed to succeed. The course includes; Advanced Excel, word processing, developing CRMs, understanding databases, agile methodology, project management, digital marketing and interacting with the cloud.

School course examples

"Many of today's school children will work in new job types that do not yet exist, most of which are likely to have an increased premium on both digital and social-emotional skills.3 They will be introduced to wholly new business models whose workforces are much more distributed. In an increasingly interconnected world, future workers will be expected to collaborate with peers residing in various parts of the globe, understand cultural nuances and, in many cases, use digital tools to enable these new types of interactions."

WORLD ECONOMIC FORUM: SCHOOLS OF THE FUTURE (JAN 2020)

Digital Enterprise: Software Development
Technical portfolio of individual and group work
>160 hours

An on-line course to prepare S6 students for a career in the tech industry. The course aims to encourage innovation, creativity and entrepreneurial skills. Utilising industry projects and team collaboration in a remote working environment, students create digital applications as they form their own project teams. The course will culminate in a business data science project with the emphasis on collaboration, team working and project management skills using contemporary collaboration and project management tools.

Digital Enterprise: Data Science
Technical portfolio of individual and group work
>160 hours

An online course to prepare S6 students for a career in Data Science. The course aims to encourage innovation, creativity and analytic skills. Delivered six hours per week for an academic year using zoom classes, zoom workshops and webinars, students will also have access to additional online resources (videos, quizzes, presentations and exercises).

On the course learners get the opportunity to apply the principles of data science and learn how to manipulate data using both business (Excel) or programming applications (Python). They will be taught to analyse data to provide business intelligence and create data visualisations such as charts, dashboards and storytelling. The course will culminate in a business data science project with the emphasis on collaboration, team working and project management skills using contemporary collaboration and project management tools.

Code/Divis/on

Data Analysis and Business Applications (Introduction)
SQA Accreditation: Level 7
80 hours

Students will learn how to develop and fully utilise Excel as well as being introduced to other applications that can unlock the power of data analytics to create visual storyboards and dashboards. The course will include: extracting and cleaning data, data manipulation using pivot tables, charts and formula, statistical analysis and building dashboards.

Data and Python Programming (Introduction)
SQA Accreditation: Level 7
80 hours

Students will learn how to utilise a programming language like python to interrogate and display data. Emphasis will be placed on the use of modularity, functions, libraries and code reuse. The course will include: Data sources, data types and structures, secret management, manipulating data from external sources, cleaning and wrangling data, statistical analysis, creating visualisations.

Java Programming (Introduction)
SQA Accreditation: Level 7

This course will focus on how organisations utilise a programming language like java to build applications. Emphasis will be placed on the use of OO methodology, modularity, methods, libraries and code reuse. The course will include: Objects and classes, data types, data structures, selection, iteration, parameter passing, constructors, inheritance, polymorphism, sorting and searching algorithms and testing.

School courses

Code Division

codedivision.co.uk

Community course examples

"With societal unrest on the rise across much of the industrialized and emerging world, collaboration between the public and private sectors can advance an entirely different agenda—one in which people's futures as well as global economic prospects are enhanced by mobilizing worldwide mass action on better education, jobs and skills. Within this overarching vision, it is critical that new sources of data and innovative insight development help empower effective, efficient and coordinated action."

WORLD ECONOMIC FORUM: JOBS OF TOMORROW (JAN 2020)

Digital Enterprise: Full Stack Development
SQA Accreditation: PDA Software Development (Level 8)
36 Weeks

The course combines practical professional experience with creative approaches to enterprise and innovation that aim to help the learner develop their entrepreneurial spirit. Learners will gain an understanding of industry processes and technologies; agile, UX design, test driven development, HTML, CSS, JS Frameworks, Java and SQL. Learners will build up a portfolio assessed by work based assessors against an industry competency framework (SFIA).

There will be input from industry with webinars, workshops and mentoring. Learners will work with a third sector client to create innovative solutions to real world issues. Using agile methodology and guided by mentors, these teams organise their own stand-ups, sprints and set their own milestones, deadlines and deliverables. They will also receive mentoring from entrepreneurs in order to gain real world experience in creating start-ups, there will also be opportunities to present their products and ideas to the wider tech community.

HND Software Development: Apprentice Pathway
SQA Accreditation: HND Software Development
76 Weeks

This course is created utilising the Higher National (HN) Framework, using both core and optional HN units and is delivered fully online combined with a competency framework (SFIA). The aim of this award is to prepare students for working within the tech sector, with the units that make up the award having been created in collaboration with the needs of employers. The units, technologies and processes are all designed to provide both the practical and underlying skills needed in the current in the workplace. The course will also offer additional vendor qualifications and an industry group project, creating a unique bespoke course designed to meet the business needs of employers and provide clear progression pathways for each learner. Topics covered include; Java and Python Programming, OO analysis, design and programming, algorithms, SQL and Relational Databases, front end frameworks and MVC, UX design, data analysis and testing software.

Code Division

codedivision.co.uk

Business Technology
SQA Accreditation: PDA Business Technology (Level 7)
15 Weeks

This updated course embeds the PDA in Information Technology and delivers the essential skills and knowledge needed for a range of roles within technology. There is a particular emphasis on remote working and the different skills and technologies needed to succeed. The course includes; Advanced Excel, word processing, developing CRMs, understanding databases, agile methodology, project management, digital marketing and interacting with the cloud.

Cyber Resilience (Advanced)
SQA Accreditation: PDA Cyber Resilience (Level 8)
24 Weeks

This course encompasses the new PDA in Cyber Resilience. Its aim is to provide knowledge and skills in cyber security to increase awareness and develop deeper knowledge and appropriate skills of the discipline. This course embeds the qualification within a framework that promotes practical skills and competencies. Suitable for all learners who wish to develop their cyber security awareness in order to strengthen the cyber resilience of their employer organisation. This course covers: Threat Analysis, Cyber Security Controls, Intrusion Detection, Analysis and Response, Ethical Hacking and Penetration Testing.

Object Oriented Programming
SQA Accreditation: PDA Software Development (Level 8)
15 Weeks

This course will focus on how organisations utilise a programming language like java to build applications. Emphasis will be placed on the use of OO methodology, modularity, methods, libraries and code reuse. The course will include: Objects and classes, data types, data structures, selection, iteration, parameter passing, constructors, inheritance, polymorphism, sorting and searching algorithms and testing.

Code
Divis/on

codedivision.co.uk

Course Design

All our courses centre on work based learning. Work Based learning encourages the development of new skills, knowledge and personal development. It encourages a reflective practice that enables learners to develop new knowledge and skills that can be applied in real world contexts.

Learners are placed at the centre of their own learning and are encouraged, with guidance, to develop their own personal development plan and an e-portfolio of their work.

Learners are assessed against skills and competencies. These competencies cover both the behaviours and technical attributes recognised by industry as required in order to to perform effectively in a variety of job roles. This includes behavioural skills such as collaboration, effective communication and a rational and organised approach to work. Functional Skills cover the technical skills needed to perform a job role. Learners are assessed against an industry competency framework (SFIA).

Learners also gain accreditation through Scottish Qualification Authority awards. Code Division offer a number of specific National Qualification units (Level 4 to Level 6) on a range of different technology subjects. We also offer National progression awards in Data Science, Cyber Security and Software Development. These awards consist of different units designed to provide a foundation of practical skills in each of these areas.

Code Division also offers Higher National units (Level 7 to 9). These units are specifically designed to provide both the practical skills and theoretical knowledge for specific job roles. We also offer Professional Development Awards in Data Science, Business Technology, Software Development and Cyber Security. These awards are aimed at developing the skills of those already in employment who wish to broaden their skills base.

For more detail on our accreditation and information on how we design our courses please visit our website or contact us directly.

Industry courses:

businessdevelopment@codedivision.co.uk

Community courses:

community@codedivision.co.uk

School courses:

schools@codedivision.co.uk

SQA Approved Centre

WE'RE A SOCIAL ENTERPRISE

Company Ltd by Guarantee,
No SC630683.

@codedivision.uk

@codedivision1

codedivision.co.uk