

How can I get into STEM?

Did you know that you don't always need a degree to get into a STEM career? You might be surprised to learn that there are many pathways, at various levels of the SCQF framework, that you can take!

Choosing the right subjects

Your career pathway starts at school and is influenced by the subjects that you choose to do. If you haven't seen our 'What is STEM?' section, you can see STEM related Nationals and Foundation Apprenticeships below.

- [Applications of Maths](#)
- [Biology](#)
- [Chemistry](#)
- [Computing Science](#)
- [Design and Manufacture](#)
- [Design and Technology](#)
- [Engineering Science](#)
- [Environmental Science](#)
- [Fashion and Textile Technology](#)
- [Geography](#)
- [Graphic Communication](#)
- [Health and Food Technology](#)
- [Human Biology](#)
- [Mathematics](#)
- [Mathematics of Mechanics](#)
- [Music Technology](#)
- [Physics](#)
- [Practical Electronics](#)
- [Practical Metalworking](#)
- [Practical Woodworking](#)
- [Science](#)
- [Statistics](#)
- [SfW Automotive Skills](#)
- [SfW Building Services Engineering](#)
- [SfW Construction and Engineering](#)
- [SfW Construction Crafts](#)
- [SfW Creative Digital Media](#)
- [SfW Energy](#)
- [SfW Engineering Skills](#)
- [SfW Food and Drink Manufacturing](#)
- [SfW Health Sector](#)
- [SfW Laboratory Science](#)
- [SfW Textile Manufacturing](#)

In addition to the National subjects, you might also have the opportunity to do a Foundation Apprenticeship. Those that are STEM related are listed below. If you're interested in finding out more about the Foundation Apprenticeship Programme go to <https://www.planitplus.net/FoundationApprenticeships/>.

- [Civil Engineering](#)
- [Creative and Digital Media](#)
- [Engineering](#)
- [IT: Hardware and System Support](#)
- [IT: Software Development](#)
- [Scientific Technologies \(Laboratory Skills\)](#)
- [Social Services and Healthcare](#)

This gives you an idea of just how broad the subject areas can be and if you look at the section 'STEM Case Studies' you'll see videos of people working in STEM and the wide and varied types of jobs that you can do.

Exploring your post-school options

So, what are your choices after school for getting into a STEM career? That will depend on what job you want to do. For example, if you want to be a Chartered Civil Engineer, you'll need to do a degree, but if you wish to work in cyber security, then you could do an apprenticeship or Higher National Certificate or Diploma (HNC/D).

You can explore the career areas and job profiles at <https://www.planitplus.net/CareerAreas/>. Have a look at the 'Getting in' section of job profiles that interest you to see what qualifications are required.

Below is a brief description of progression routes after school.

Modern Apprenticeships

If you would like to earn while you learn, then this route could be ideal. You work for an employer who provides on the job training and you work towards a relevant Scottish Vocational Qualification. You might also attend college on day or block release.

There are over 40 STEM related Modern Apprenticeships, including different areas of construction, engineering, data analytics, digital applications, cyber security, life sciences and some areas of health and medicine. These are available from SCQF Level 6 up to Level 9. Entry requirements vary depending on the level. Have a look at <https://www.planitplus.net/ModernApprenticeships/> for more information.

Graduate Apprenticeships

This route gives you the opportunity to earn a wage and work towards a qualification from HND level up to Master's degree. There are now a number of Graduate Apprenticeships available, most of which are STEM related. These include Civil Engineering; Construction and the Built Environment; Cyber Security; Engineering: Design and Manufacture; Engineering: Instrumentation, Measurement and Control; IT: Management for Business; and, IT: Software Development.

Entry requirements vary depending on the subject and level. See more details at

<https://www.planitplus.net/GraduateApprenticeships/>

Company Apprenticeships

Some large organisations offer apprenticeships for school leavers that can lead to qualifications such as SVQs and up to degree. Some of these companies include the Civil Service, BAE Systems, Rolls Royce and BT. See our 'Useful Links' page.

Further Education

There is a huge range of STEM related courses offered by colleges in Scotland at lots of different levels. These include National Certificates (NC), Higher National Certificates (HNC) and Scottish Vocational Qualifications (SVQ).

If you study up to National 4 or 5, you might go on to do an NC and then progress to an HNC and possibly a degree after that.

If you do 1 or 2 Highers then you could enter at HNC level and then progress to a degree.

Higher Education

This level of education includes Higher National Diplomas (HND), degrees and postgraduate courses. If you have 2 or 3 Highers you could gain entry to an HND and with 4 or 5 Highers you could get onto a degree.

Even if you don't get the grades for entry straight onto a degree, you could do an HND first and then progress to the second or third year.

If you're interested in College or University Courses you can find details of all courses offered at every Scottish [College](#) and [University](#) in the courses section of Planit.