

Coding Resources

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Online Courses and Tutorials:

Code Academy

Url: <https://www.codecademy.com/>

Code Academy has free practical tutorials on most common programming languages, there is also an option to pay more for more obscure languages. This is a good starting point to learn the basics of a new language.

Khan Academy

Url: <https://www.khanacademy.org/computing/computer-programming>

Khan Academy is a similar structure to code academy however, they also have 'talk-throughs' where somebody will talk you through the tutorial.

WS3 Schools

Url: <https://www.w3schools.com/>

WS3 provides tutorials on most programming languages. These generally are not walk-through tutorials where you come out with a finished project or piece of code but they explain how to use certain tools and the syntax of the language. They provide code segments which you can edit and run. This is a useful resource for when you forget syntax or how to do the simple things during a project.

GeeksForGeeks

Url: <https://www.geeksforgeeks.org/>



GeeksForGeeks is a similar format to WS3 Schools. You can pay for online courses but they also have lots of information about code syntax, algorithms and data structures. You can also find useful interview tips and other discussions on GeeksForGeeks.

edX

Url: <https://www.edx.org/>

edX provides courses from universities all around the world on a variety of subjects, including computer science. You can search for courses and enroll to get started! We recommend CS50's Introduction to Computer Science by Harvard on EdX and CS50's Web Programming with Python and JavaScript.

Dash

Url: <https://dash.generalassemb.ly/>

Dash has some great courses on front-end programming (JavaScript, CSS and HTML) which will teach you how to make a website!

Free Code Camp

Url: <https://www.freecodecamp.org/>

Free Code Camp is again similar to Codecademy. It mainly focuses on web development with lots of JavaScript tutorials. You can also earn official certifications through Free Code Camp!

In-person Courses and Tutorials

Code-First Girls

Url: <https://www.codefirstgirls.org.uk/>



Code-First is a great community who work with companies to increase the number of women in Tech. They run free part-time coding courses which you can sign-up to - there's one here in Edinburgh!

Programming Society

Url: <https://www.eusa.ed.ac.uk/activities/societies/society/17825/>

Programming society run semester-long Python courses aimed at beginners (but also sometimes have more advanced courses too). These are run by students and have one class every week.

Code Clan (not free)

Url: <https://codeclan.com/>

Code Clan is a great non-profit that runs a variety of coding courses. These are paid for, however, if you go onto work in industry many companies pay for their employees to go on the courses.

For Practising

HackerRank

Url: <https://www.hackerrank.com/>

Hackerrank is a great resource for improving your problem solving skills - this is especially useful for coding interviews! There are questions of many different aspects of coding. You can use their Interview Preparation Kit questions to prepare for a technical interview or compete against others by solving problems!

LeetCode

Url: <https://leetcode.com/>



LeetCode is similar to HackerRank. You can practice your coding skills with problem solving practice questions - they even have mock tests using interview questions from real companies.

Kaggle

Url: <https://www.kaggle.com/>

Inside Kaggle you'll find all the code & data you need to do your data science work. Use over 19,000 public datasets and 200,000 public notebooks to conquer any analysis in no time. You can compete and discuss projects. It also has courses on all things you may need for data science/machine learning!

Programming Club

Url: <http://progclub.inf.ed.ac.uk/>

The University of Edinburgh's School of Informatics runs the Programming Club. This is a great place to practice coding on real projects with lecturers and tutors there to help.

Other Resources

- StackOverflow - great for debugging and discussions
- Major Hacking League (<https://mlh.io/>) - find hackathons across Europe. These are great places to improve your coding skills and win prizes!

If you have any resources you would like to see added to this list get in touch at edinburghuniversitywomeninstem@gmail.com