



**MANCHESTER  
CODES**



**Software  
Engineer  
FastTrack**



**PROSPECTUS  
2021**



```
function outerFunction () {  
  const outer = `I'm the outer function!`  
  
  function innerFunction() {  
    const inner = `I'm the inner function!`  
    console.log(outer) // I'm the outer function!  
  }  
  
  console.log(inner) // Error, inner is not defined  
}
```

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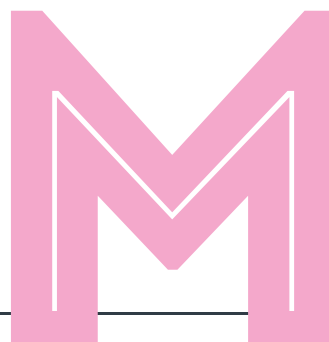
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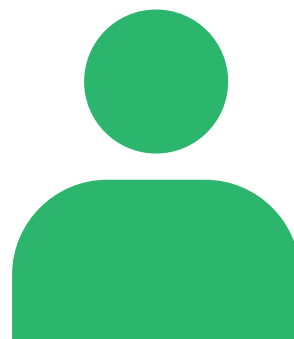
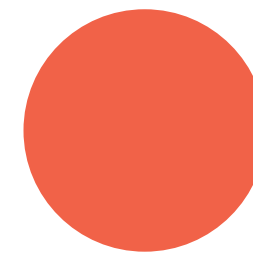
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**Contact us**

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# THE FUTURE OF TECH EDUCATION





# WHY MANCHESTER CODES?



## **A COURSE DEVELOPED WITH FLEXIBILITY AT ITS CORE**

Our unique evening classes allow you longer to digest the course and pick up the skills you need for industry over 24 weeks.

## **NO NEED TO QUIT THE DAY JOB**

You don't need to quit your day job or give up other commitments to study with us. Our courses have multiple start dates, with different evenings in the week to choose from.

## **A CURRICULUM ALWAYS EVOLVING**

We are always tweaking and improving our curriculum to reflect the needs of industry. We are never still, never static, always improving the quality of the curriculum for our students.

## **OUR TUTORS ARE EXPERTS IN THE FIELD**

All of our tutors and mentors that you interact with during the course work as software engineers and have additional day-to-day experience within the tech industry. You can therefore rest assured that we are teaching you the most up-to-date practices and technology, by some of the best instructors in the industry.





## **YOUR PROGRESS IS OUR TOP PRIORITY**

Each week we send out an anonymous feedback form to ensure we maintain the highest standard of tuition and support. We also offer regular 1-2-1s and code reviews to our students and offer Saturday Drop in sessions between the hours of 10AM - 4PM.

## **FINANCIAL SUPPORT**

We are very proud to offer a 12 month interest free finance option on our Software FastTrack course, allowing you to start your journey with us much sooner. If your circumstances change and you struggle to keep up with payments, we'll help to find a solution that works for you.





**BASED ON OUR LAST 3  
COHORTS IN 2020, 43%  
OF OUR LEARNERS  
IDENTIFIED AS WOMEN.**

# WE EMBRACE DIVERSITY

■ We welcome and embrace all genders, faiths, sexual orientations, cultures, disabilities and differences. Regardless of your background or preferred operating system!

Differences at Manchester Codes are not just celebrated but are encouraged. We believe that adding value comes from not seeing solutions differently than others.

As part of our ongoing commitment to close the gender gap in tech, we offer a discount to people from under-represented backgrounds.

We are also very proud to have gender parity across our teaching team.

## ■ DIVERSITY GRANT FUND

In our ongoing commitment to Diversity we have now extended our Diversity Grant Fund to encourage wider participation into our vibrant technology industry to include those from underrepresented backgrounds.

So if you identify as a woman, or are from a Black, Asian and Minority Ethnic group we would like to offer our support by giving you a £500 discount on our course fee.



# OUR CURRICULUM





# DESIGNED FOR COMPLETE BEGINNERS

Software Engineer FastTrack is designed for complete beginners, so don't worry if you've never tried coding before. Unlike other courses out there, you won't just learn how to make websites, but rather a much wider spectrum of software engineering which includes:

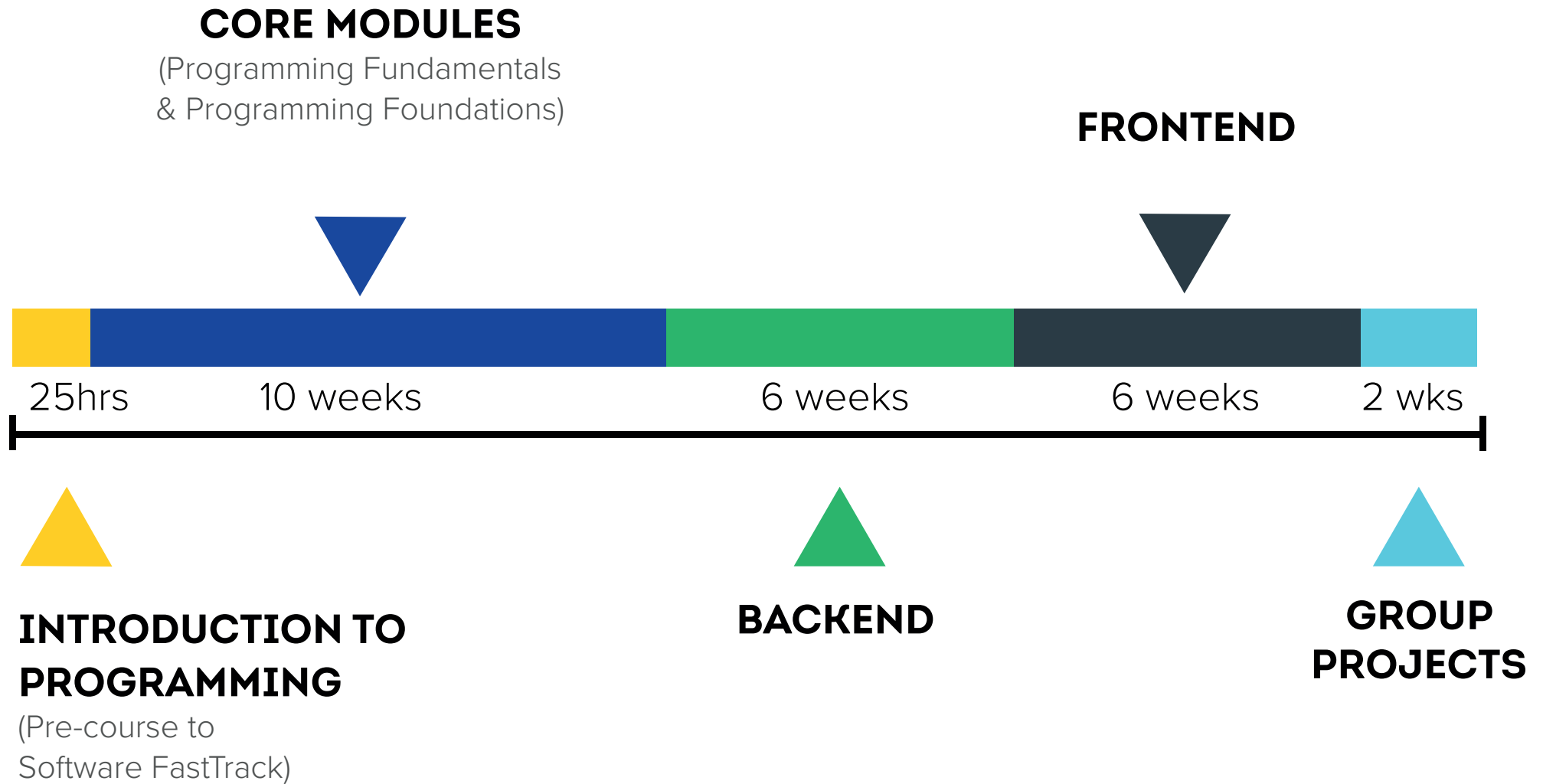
- How software engineers work and the tools they use.
- The fundamentals of a programming language and best practice.
- How to store, manipulate and retrieve data (backend development).
- How to create data-driven visual and interactive experiences (frontend development).

You'll also gain valuable experience working in a software development team in our Group Projects module - a must have if you are looking to make a career change.

**WE DON'T JUST TEACH  
YOU HOW TO CODE, BUT  
ALSO HOW TO LEARN.**



# COURSE TIMELINE



# PROGRAMMING FOUNDATIONS

Being a Software Engineer isn't just about knowing how to code, but also how to use a different range of tools and techniques to work efficiently. This module aims to guide you on exactly that. It's more hands off and self guided than our other modules, inspiring you to think outside the box.

In this 4 week block, topics will include:

- Setting up your development environment
- Command line basics
- Version control with Git
- HTML
- CSS
- Advanced CSS
- Tooling and workflow



# PROGRAMMING FUNDAMENTALS

■ In this module you will explore JavaScript basics, be introduced to Object Oriented Programming and familiarise yourself with debugging, refactoring and version control systems.

■ Once you know the basics, you can more easily learn specific languages to build on top of what you already know. It's time to introduce you to skills you can apply to almost any programming language in the future. In this 6 week block, topics will include:

- ☛ JavaScript Basics
- ☛ DOM manipulation
- ☛ Object Oriented Programming
- ☛ Node Package Manager and Jest
- ☛ Developer best practices
- ☛ Test Driven Development (TDD)
- ☛ Jest lifecycle methods
- ☛ Scope and closure modules
- ☛ JavaScript memory management
- ☛ Class and arrow functions
- ☛ Debugging
- ☛ Git workflow
- ☛ Coverage and test doubles



# BACKEND DEVELOPMENT

As a full stack web developer, you'll have an active hand in implementing databases, configure and deploy your applications to the cloud.

In this 6 week block topics will include:

- ☛ Docker
- ☛ Internet, the Web & HTTP
- ☛ Relational databases
- ☛ Web applications
- ☛ API development
- ☛ How do web applications work?
- ☛ Express.js
- ☛ Asynchronous code
- ☛ REST standards
- ☛ Sequelize
- ☛ Express middleware
- ☛ Clean code
- ☛ Deployment to a server



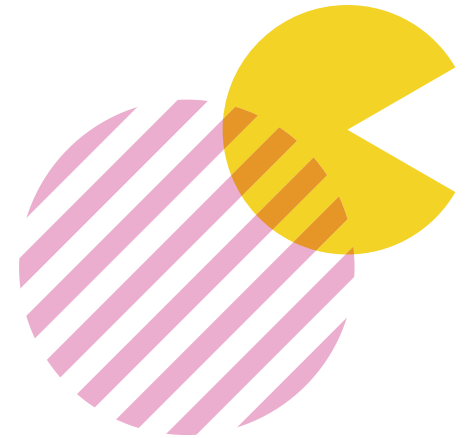


# FRONTEND DEVELOPMENT

- ▶ In this 6 week block you will build upon previous knowledge and learn about the inner workings of the browser - and discover what happens when a page is loaded and displayed on your computer. You can expect to learn how to create data-driven visual and interactive experiences.
- ▶ Previously you will have been exposed to JavaScript and the DOM for web page interactivity. In this module you will further this knowledge with another important final piece and complete the fundamentals of front-end development.
- ▶ According to the StackOverflow Developer Survey 2020, React is the most in-demand front-end framework right now. Informed by demand and industry, React is the predominant focus for this module. You will be introduced to the basics of the library followed by the latest development best practices and how to test your React applications. You'll also be able to test your knowledge with a sample React tech test.

## Topics covered:

- ☛ React
- ☛ ES6
- ☛ Web requests
- ☛ Async React
- ☛ Lifecycle methods
- ☛ React Hooks
- ☛ Testing in React
- ☛ React Router
- ☛ Events and form handling
- ☛ State management
- ☛ Styling React components
- ☛ Sass
- ☛ Git Flow
- ☛ OAuth
- ☛ Session management



# GROUP PROJECTS

- Over your final two weeks on the course you will collaborate with three or four others in your cohort using online tools, like Google Meet, GitHub and project management tools like Trello to collaborate and share your progress.
- You will become familiar with splitting the project into smaller tasks and managing your progress through kanban boards.

Just some of the projects our students have worked on before:

- Monzo loyalty scheme
- Virtual pet mobile game
- Movie streaming recommendations
- Takeaway menu allergy checker
- Language learning app
- COVID-secure restaurant locator
- Offline hiking routes





# EMPLOYABILITY



# OUR DEDICATED CAREERS ADVISER WILL PROVIDE YOU WITH...



Personal assistance in  
your job search



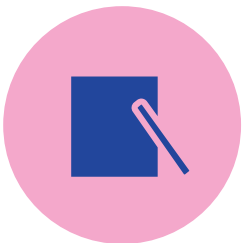
Introductions to our hiring  
partners and contacts



Personalised feedback  
and career guidance



CV review and guidance



Interview preparation



LinkedIn profile  
optimisation



GitHub portfolio  
review



Access to our library of  
tech tests





# WHERE OUR STUDENTS WORK



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“Joining Manchester Codes was probably the best decision I've ever made, I never thought it would be possible to change careers in such a short period of time”.

**- Sofia November 2020 Sofia now works at Jaguar Land Rover.**

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“Being able to see and use the applications the candidates had built in the group projects was so helpful in the recruitment process as it allowed us to get a taste of their work in action. We were impressed with the calibre of the applicants and would definitely hire from Manchester Codes again.”

**Sophie Walker, Co-founder & COO, Dsposal;**



“

**MANCHESTER CODES WAS A LIFE  
CHANGING EXPERIENCE FOR ME.  
YOU ARE JOINING A COMMUNITY  
OF HELPFUL LIKE-MINDED  
PEOPLE ALWAYS WILLING TO  
HELP - EVEN AFTER THE COURSE.**

**- LUKE (GRADUATE)**

”

# THE TEAM





**Andreea**  
Tutor



**Dan**  
Tutor



**Mark**  
Tutor



**Ersel**  
Head of  
Teaching



**Tom**  
Mentor



**Whitney**  
Mentor



**Ian**  
Lead Tutor



**Rui**  
Tutor



**Kirsty**  
COO



**Shirelle**  
Office  
Manager



**Michael**  
Mentor



**Joe**  
CEO

**...and more  
to come in  
2021!**



**Jenny**  
Tutor



**Martyna**  
Lead Tutor



**Gareth**  
Mentor



**Jo**  
Mentor



**Andrew**  
Careers  
Adviser

# MODULE LEADS



## CORE MODULES

**Rui**

Software Engineer at  
Space48



## BACKEND

**Ian**

Software Engineer at  
the BBC



## FRONTEND

**Martyna**

Software Engineer at  
Gear4Music

Our Module Leads are responsible for the delivery of each course module. They have years of experience in software development and oversee delivery alongside our tutors and mentors.

All of our tutors and mentors that you interact with during the course work as software engineers and have additional day-to-day experience within the tech industry.

You can therefore rest assured that we are teaching you the most up-to-date practices and technology, by some of the best instructors in the industry.





# CONTACT US



If you have any questions about the course or are thinking of applying then please get in touch and we'd be happy to help..



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MC