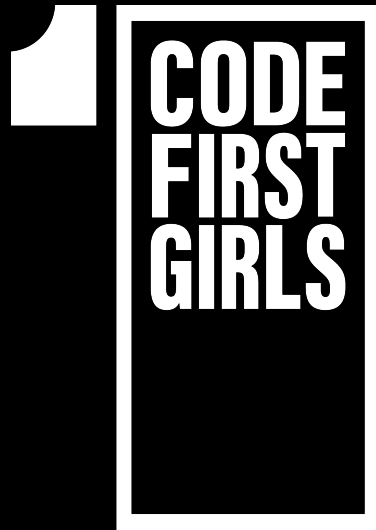
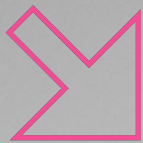


WELCOME TO OUR FINAL SESSION



Agenda	
6:30 - 7:30	Project Prep time
7:30 - 8:15	Project presentations and Feedback
8:15 - 8:30	What's next?

GIVING WOMEN THE ~~UN~~FAIR ADVANTAGE



**SO WHAT'S
NEXT?**

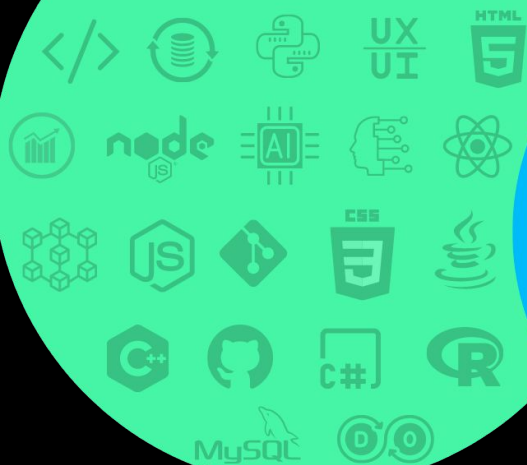


**CODE
FIRST
GIRLS**

THE CFG OPPORTUNITIES

MOOCs

SPRINTS & CHALLENGES



CLASSES



CFGDEGREE



+ MASTERS



SUCCESS STORY

"I have recently been offered another position which includes paid training and the chance to work as a consultant. I can honestly say I wouldn't be in this lucky position if I hadn't had the opportunities to study with CFG already. This has been a huge boost to my confidence and made me realise that I am still a coder. I cannot thank CFG enough for the experiences I have had, in particular winning the Python app project last year! It gave me a tech project to discuss for my final interview presentation."



**FULL DETAILS IN
THE FOLLOWING
SLIDES**

 **GIVING WOMEN THE
UNFAIR
ADVANTAGE**



MOOCs

ABOUT



CFG's massive open online courses are designed in short segments to impart technical skills, confidence, career discovery or real-world problem solving. They are delivered through YouTube Live to facilitate maximum social interaction and reach.

WHAT WE DO:

- + MOOC Sprints made up of 1-hour sessions, once a week, for 4 weeks
- + MOOC Challenges made up of two 1-hour sessions
- + No cap on attendees
- + Fee of charge
- + Live interactive instruction
- + Accessible to all
- + Branded certification (for 4 x live session sprint completion)



EXPANDING OUR PRODUCT CURRICULUM

MOOC SPRINT

CORE CONCEPTS

Best for: those starting out or wanting to learn the basics across our core concepts that lead directly into our 8-week class topics.

- Intro to Coding
- Intro to Python
- Intro to Data
- Intro to Web Dev
- Intro to JavaScript
- Among many more...



Linked MOOC Challenge

MOOC SPRINT

CAREER BOOSTER

Best for: those who are applying for roles in tech.

- CV & Profile Building
- Interview Prep & Confidence
- Tech Assessments & Testing
- Building your personal brand



No linked MOOC Challenge

MOOC SPRINT

TECH TOPICS

Best for: all levels and experience. From beginners to our CFGdegree grads (and alumni!) Learn a new skill or freshen up on existing knowledge.

- Approx 15 topics across tech
- Voted for by our community & clients
- Scheduled across the year



Linked MOOC Challenge



CLASSES

MORE CLASSES

- + 8-week closed classrooms
- + Available for university grads, career switchers / professionals, school leavers
- + Branded certification (after attending 6/8 + submitted project)
- + Additional certificate for winning project!



NEW

JAVASCRIPT

- 01 JavaScript basics
- 02 Conditions & logics
- 03 The DOM
- 04 Intro to ReactJS
- 05 React components
- 06 States & events
- 07 Styling React components
- 08 Project presentations & feedback



DATA & SQL

- 01 Intro to databases
- 02 Basic SQL syntax
- 03 Working with data
- 04 Joins and Unions
- 05 Expressions & Functions
- 06 Views, Transactions & Procedures
- 07 Database design & project
- 08 Project presentations & feedback



PYTHON & APPS

- 01 Python basics
- 02 Problem-solving
- 03 Decision-making in your program
- 04 Third-party libraries & API's
- 05 Project work
- 06 Build & deploy your app 1
- 07 Build & deploy your app 2
- 08 Project presentations & feedback



WEB DEVELOPMENT

- 01 HTML basics
- 02 CSS basics
- 03 Project Design
- 04 Intro to Bootstrap
- 05 Intro to JavaScript
- 06 UX/UI & accessibility
- 07 Github & Project work
- 08 Project presentations & feedback



CFGDEGREE

ABOUT THE CFGDEGREE

Completing a Kickstarter class is the first step. You are now eligible to apply for CFGdegrees which are open by application and interview to high potential candidates who want to pursue a career pathway in data, software, full-stack and new for 2023, Product Management. Candidates must have a class certification, have passed an entry assessment and demonstrate a commitment to working with one of our partner companies.

WHAT WE DO:

- + Screening, application criteria and interview
 - + 14 week programme & assessment
 - + 7 weeks foundation
 - + 6 weeks specialisation (+1 reading week)
 - + Interview prep and coaching
 - + Can be targeted by geography
 - + Branded certification
-



CFGDEGREE // FOUNDATION

7-week foundation II Applicants are screened, tested, and interviewed by CFG

WEEK 1-2

+PYTHON

BASIC PROGRAMMING PRINCIPLES

- 01** Data types and variables
- 02** Functions and problem solving
- 03** Standard libraries
- 04** Decision making and IF logic
- 05** Python data structures
- 06** Introduction to testing
- 07** Reading and writing files
- 08** Python APIs

WEEK 3-4

+SQL

FOUNDATIONS OF DATA MANAGEMENT

- 01** Database creation and SQL syntax
- 02** Queries, logic operators & constraints
- 03** Relational DB, primary & secondary keys
- 04** Filtering and aggregation data
- 05** Complex structures: joins & union
- 06** Stored procedures & user defined functions
- 07** Functions & transaction management
- 08** Views, locks, DB backup

WEEK 5-7

BUILDING END TO END SYSTEMS

- 01** Version control
- 02** Exception handling and debugging
- 03** Program flow management
- 04** Python: build API & micro services
- 05** Integration: Python, DB & APIs
- 06** Regex and Functional Programming
- 07** Tableau vs Power BI for data visualisation, introduction to Jira
- 08** Code practise, assessment and knowledge check



CFGDEGREE // SOFTWARE

7-week specialisation + 1 x reading week || All candidates also receive interview prep and coaching

Practical workshops to solve programming problems and apply techniques, course projects, and assessments.

WEEK 9-10

PYTHON MODULES & LIBRARIES

- 01** Object Oriented Programming
- 02** Programming arrays & hash tables
- 03** Itertools and Collections
- 04** Python data structures, stack & queues

WEEK 11-12

COMPLEX DATA STRUCTURES

- 01** Programming arrays & hash tables
- 02** Recursion Programming
- 03** Linked Lists
- 04** Graphs

WEEK 13-14

ALGORITHM DESIGN

- 01** Time-space complexity
- 02** Programming algorithms
- 03** Search and sorting algorithms
- 04** Famous algorithms



CFGDEGREE // DATA

7-week specialisation + 1 x reading week || All candidates also receive interview prep and coaching

Practical workshops to solve programming problems and apply techniques, course projects, and assessments.

WEEK 9-10

ANALYTICAL LIBRARIES AND PACKAGES

- 01** Pandas (+Jupyter) and data frame
- 02** Pandas visualisation and analysis
- 03** NumPy library for scientific analysis
- 04** Matplotlib library

WEEK 11-12

SCIENTIFIC DATA PROCESSING

- 01** Machine learning with Python
- 02** SciKit learn for machine learning
- 03** Data cleaning and transformation
- 04** Statistical concepts: data analysis

WEEK 13-14

DATA MODELLING AND EVALUATION

- 01** Programming algorithms
- 02** Explanatory analysis
- 03** Predictive modelling
- 04** Model evaluation

CFGDEGREE // FULL-STACK

7-week specialisation + 1 x reading week || All candidates also receive interview prep and coaching

Practical workshops to solve programming problems and apply techniques, course projects, and assessments.

WEEK 9-10

DEEP DIVE INTO WEB DEV & REACT

- 01** Overview of Web Dev & HTML
- 02** Styling with CSS (incl. Bootstrap)
- 03** Behaviour using JavaScript
- 04** Introduction to React & components
- 05** Component styling & design patterns
- 06** Introduction to State and mutations
- 07** UX/UI Design
- 08** Interface planning via wireframing and blueprint design

WEEK 11-12

NAVIGATION, BEHAVIOUR AND TYPESCRIPT

- 01** Adding behavior to components
- 02** Navigating with Router
- 03** Router props and further coverage
- 04** Lifecycle methods
- 05** React Hooks
- 06** Tying it all together
- 07** Introduction to Typescript
- 08** Types, Union Types and further TypeScript coverage

WEEK 13-14

FULL-STACK INTEGRATION

- 01** Version control
- 02** Assessment and knowledge check
- 03** Exception handling and debugging
- 04** Coverage of Angular and relations to it
- 05** Mocking back end infrastructure and practicing full-stack development
- 06** Integration: connecting to front-end
- 07** Overview of Linux and command line
- 08** Assessment and knowledge check

CFGDEGREE // PRODUCT MANAGEMENT

NEW

7-week specialisation + 1 x reading week || All candidates also receive interview prep and coaching

Practical workshops to solve programming problems and apply techniques, course projects, and assessments.

WEEK 9-10

KEY CONCEPTS OF THE PRODUCT MGT PROCESS

- 01** Product vision & product life cycles
- 02** Product mapping & roadmaps
- 03** Market research
- 04** Data analysis & financials
- 05** Tools (Jira, Confluence, Kanban etc.)
- 06** Feature prioritisation & release management
- 07** Backlog management
- 08** Business case preparations & presentation skills

WEEK 11-12

PRINCIPLES OF DESIGN & HANDOVER TO DEVELOPERS

- 01** User research & discovery
- 02** Accessible design and tools (e.g. Figma)
- 03** User journey mapping
- 04** User experience (UX) & wireframing
- 05** User interface (UI) typography, colour
- 06** User interface (UI) high fidelity design
- 07** Prototyping and user testing
- 08** Developer briefing & case scenarios

WEEK 13-14

TESTING, QA & STAKEHOLDER MANAGEMENT

- 01** Sprints and sprint management
- 02** Agile methodologies and concepts
- 03** Role of a SCRUM master
- 04** QA planning & test environment set-up
- 05** Global App Testing (GAT)
- 06** Bug tracking and documentation
- 07** Problem-solving & troubleshooting
- 08** Stakeholder management



+MASTERS

ABOUT +MASTERS

+Masters are open by application and interview to candidates who wish to continue their learning and extend their career pathways into either DevOps & Cloud, Cyber Security, Mobile App Development, Data Analyst or AI/ML . Candidates must have a CFGdegree certification (or equivalent level) or have been in a relevant tech role.

WHAT WE DO:

- + Screening, application criteria and interview
 - + 4 week programme & assessment
 - + Extension to CFGdegree
 - + Flexible start at end of CFGdegree or with a later cohort
 - + Can be targeted by geography
 - + Branded certification
-



+MASTERS // DEVOPS & CLOUD

Related roles to this area: DevOps Engineer, Site Reliability Engineer, Cloud Engineer, Software Engineer

WEEK 1

WORKING WITH CLOUD PLATFORMS

- 01** History of cloud computing
- 02** and its advantages
- 03** Intro to AWS, Azure and Google Cloud and key fundamentals
- 04** Architectural design principles
Security and compliance

WEEK 2

USING DOCKER

- 01** Overview of Docker and its importance for industry
- 02** Creating and using containers
- 03** Container commands and isolation
- 04** AWS Container Service

WEEK 3

INTRO TO KUBERNETES & PIPELINES

- 01** Kubernetes history and need
- 02** Managing multiple containers
- 03** Overview of CI & CD pipelines
- 04** Types of deployments

WEEK 4

TYING IT ALL TOGETHER

- 01** Using Docker on AWS
- 02** Managing a cluster
- 03** Overview of Terraform
- 04** Security considerations

+MASTERS // DATA ANALYST **NEW**

Related roles to this area: Business Analyst, Data Business Analyst, Quantitative Analyst

WEEK 1

DATA SOURCES & PROCESSING

- 01** Collecting & processing data, defining quality data criteria
- 02** Data sources and mapping, establish data processes
- 03** Data cleaning and mining
- 04** Data bias

WEEK 2

DATA ANALYTICS

- 01** Data analytics with Advanced Excel
- 02** Development with Advanced Excel
- 03** Tableau visualisation and reporting
- 04** Practical analytics: case studies & data modelling

WEEK 3

DATA INSIGHTS

- 01** Statistical analysis techniques & inferential probability
- 02** Developing BI tools & insights, dashboard design
- 03** Creating reports & knowing your audience
- 04** Stakeholder management, presenting business solutions

WEEK 4

ADDING VALUE

- 01** Process automation
- 02** Data visualisation
- 03** Data ethics
- 04** BA feature enhancement

+MASTERS // MOBILE APP DEVELOPMENT

Related roles to this area: DevOps Engineer, Site Reliability Engineer, Cloud Engineer, Software Engineer

WEEK 1

OVERVIEW OF THEORETICAL CONCEPTS

- 01** Intro to React components
- 02** Styling and design patterns
- 03** Effective approaches for clean code
- 04** Differences between React and mobile-specific React Native

WEEK 2

DESIGN PRINCIPLES VIA HCI

- 01** Intro to HCI and its importance (Norman Doors)
- 02** Responsive Design
- 03** Norman's Heuristics
- 04** Applying design knowledge to mobile devices

WEEK 3

STATE MANAGEMENT & LIFECYCLE METHODS

- 01** Introduction to State management
- 02** Manipulating the State
- 03** Introduction to lifecycle methods
- 04** Adding behaviour to components

WEEK 4

NAVIGATION, REDUX & HOOKS

- 01** Component functions vs Classes and Navigation
- 02** Usage of Hooks and relation to lifecycle methods
- 03** Introduction to Redux
- 04** Overview of alternatives (Ionic, Angular)

+MASTERS // CYBER SECURITY **NEW**

Related roles to this area: Cyber Security Analyst, Cyber Security Engineer, Security Consultant, Ethical Hacker

WEEK 1

CYBER ANALYSIS

- 01** History of attacks
- 02** Network security
- 03** Web application vulnerabilities & malware attacks
- 04** Common network & host security

WEEK 2

CYBER DENIAL

- 01** Software development
- 02** vulnerabilities
- 03** Protocol analysis
- 04** Software reverse engineering
Ethical hacking techniques and practice

WEEK 3

CYBER ACCESS

- 01** Encryption techniques
- 02** Physical & environmental security
- 03** Penetration testing
- 04** Debugging/static/dynamic analysis

WEEK 4

CYBER INFRASTRUCTURE

- 01** Encryption techniques
- 02** Physical & environmental security
- 03** Penetration testing
- 04** Debugging/static/dynamic analysis

+MASTERS // AI & MACHINE LEARNING

NEW

Related roles to this area: AI Engineer, ML Engineer, AI Designer, Big Data Engineer

WEEK 1

AI & ML FOUNDATIONS

- 01** AI & ML overview, ethics
- 02** Statistics, core data science concepts and models
- 03** Validation, testing, and optimisation
- 04** Bias and variance

WEEK 2

AI IMPLEMENTATION

- 01** Classifications
- 02** PyTorch & custom datasets
- 03** Neural networks
- 04** Practical items: debugging, data augmentation, pre-trained models

WEEK 3

APPLICATION

- 01** Architecture, augmentation, debugging
- 02** Pre-trained models & transfer learning
- 03** Churn modelling, filtering, leads scoring
- 04** Deploying Fast APIs

WEEK 4

ADVANCED AI/ML

- 01** Advanced AI techniques & deep learning
- 02** Errors and failure
- 03** Kubernetes & Kuberflow
- 04** Apache Airflow & application