GA GENERAL ASSEMBLY

Becas Fundación Adecco-General Assembly 2022

Track 1: Data Analytics

Data Analytics Track

Objectives:	• *Advance problem-solving skills by developing an analytical mindset* • *Develop data literacy and competency in working with data including maths and stats knowledge* • *Understand the analytics workflow from identifying a business problem through communicating insights* • *Deep dive in data analytics processes of wrangling, preparing, analysing, interpreting and visualization of data* • *Develop working knowledge of common tools used as an analyst including SQL, Excel and Tableau/PowerBI* • *Build programming skills in Python, the most popular language for data applications*
	What we are teaching
UNIT 1 Orientation, Data Literacy and Intro to SQL	• Introduction to Data and Analytics • Analytics common tools and processes • Introduction to SQL • Grouping and Combining Data with JOINS & UNIONS • Data Cleaning • Building Data Literacy
UNIT 2 Wrangling and Preparing data with SQL	• Advanced JOINs • Dealing with Nulls • Subqueries • Functions • Windows Function and Recursive Statements

Data Analytics Track

	What we are teaching
UNIT 3 Advanced Excel Analysis with Embedded Maths and Stats	● Get to grips with the basics (formulas, formatting and data handling) ● Referencing and Lookups ● Aggregating Data with Pivot Tables ● Maths and Stats for Exploratory data analysis ● Communicating insights with Excel ● Google Analytics Workshop
UNIT 4 Data Visualization with Tableau or Power BI	● Intro to BI tool Landscape ● Importing and exploring data ● Building Common Visualizations ● Calculations and Analysis ● Building Dynamic Dashboards ● Communicating Insights **Project Outcome:** Perform an in depth analysis on a given project that demonstrates a journey through the data analytics workflow from hypothesis to communication of insights using relevant tools
UNIT 5 Advanced Unit Python and Pandas	● Python and Programming Fundamentals ● Control Flow ● Libraries and Modules ● Pandas & DataFrames ● Exploratory Data Analysis ● Stats and Modelling

Track 2: Front End Developer

Front End Development Track

Objectives:	• Get familiar with the fundamental building blocks of the web, adding and styling content with HTML and CSS • Take a developer's approach to problem-solving, coding responsive sites for mobile and the web • Learn the fundamentals of JavaScript and object oriented programming • Use JavaScript to interact with the browser, the Document Object Model, and APIs • Learn the Angular & React frameworks. & approach to building maintainable and scalable single page applications
	What we are teaching
UNIT 1 Getting Started & The Developer's Toolkit	• Culture and expectation setting • Git, Github, Command Line, VS Code Basics • Intro to Modern HTML and CSS • Semantic HTML, HTML and CSS basics • Flex-box • Accessibility on the web
UNIT 2 Programming Intro & Understanding The Web	• Computers & the internet • Programming fundamentals with Javascript • Data Types • Control flow • Functions, Arrays, Objects, Classes

Front End Development Track

	What we are teaching
UNIT 3 Web Development & Projects	- JavaScript on the web - Interacting with the DOM - Browser APIs responses including JSON **Project Outcome:** Building and deploying a responsive, interactive front end application built with HTML, CSS and JavaScript.
UNIT 4 Intermediate Web Application Development	- Frameworks Introduction - ES6 - Components & JSX - State & Props - Unidirectional Data Flow - Component Lifecycle - React + 3rd Party APIs
UNIT 5 JavaScript Frameworks & Ecosystem **(Angular + React)**	- React Router - Testing Components w/ Jest and Enzyme - React Hooks - Styling Components - Overview of the Javascript Ecosystem and Wider Frameworks e.g. Angular, Node **Project Outcome:** to Develop and deploy a data driven React application that consumes a public API

Track 3: Digital Marketing

Digital Marketing Track

Objectives:	• *Equip participants with the skills they need to be a productive and effective marketer in the 21st century.* • *Use current marketing tools and best practices to enhance brand awareness, drive sales leads, and increase customer engagement* • *Learn to translate user behaviours and motivations at different stages on the marketing funnel, into intuitive digital experiences that power revenue, loyalty, and product success* • *Build confidence and credibility to tackle complex design problems on the job.* • *Learn how to create a basic website with HTML and CSS, a versatile skill set that complements marketing* • *Perform data analysis and make effective decisions for marketing use cases using Excel, SQL, and Tableau*
	What You'll Leave With
UNIT 1 Digital Marketing Accelerator	• **Develop** data-driven personas that can be used to improve accuracy in your marketing. • **Identify** creative and strategic best practices for key marketing channels (social, search, email, paid advertising, etc.) aligned to target audiences. • **Use** data to develop segments of key audiences based on their behaviour, demographics, and interests - including targeting and retargeting. • **Analyze** the results of marketing executions and identify opportunities to improve in the future using Google Analytics.
UNIT 2 User Experience Design	• **Apply** user experience best practices as you think, analyze, and design to effectively solve problems. • **Conduct** effective user research and perform usability tests. • **Produce** full UX documentation deliverables, including personas, competitive assessment documents, feature prioritization, wireframes, and, potentially, a clickable prototype. • **Define** all possible interactions as a person moves through the structure, functionality, and appearance of software interfaces. • **Analyze and critique** the designs of others.

Digital Marketing Track

	What You'll Leave With
UNIT 3 Web Development & Projects	**Get to know the building blocks** of the web by adding and styling content with HTML and CSS. **Take a developer's approach** to problem-solving and coding responsive sites for mobile and the web. **An understanding** of accessibility on the web **Apply a mobile-first methodology** to CSS and website design with responsive design and positioning **Project:** Practice the application of marketing, UX and Web development principles and skills to a marketing scenario
UNIT 4 Data Analytics	**Advance** problem-solving skills by developing an analytical mindset. **Practice** industry standard tools and techniques for common data use cases such and Excel, SQL and Tableau **Apply** the Data Analytics workflow to solving business and marketing problems. **Analyze** insights gleaned from common data sources. **Present** data-driven observations and recommendations to stakeholders using visualizations and dashboards.