MAXimum Coding Bootcamp

Curriculum by skill area

Modules are grouped by skill area so you can find what you need quickly. Every module description is included in full.

Developer Foundations

3 modules

Source control, databases and team process

Git/GitHub	In this module, the student will learn the basics of source control management and how it is accomplished in a distributed environment.
SQL Database	The student will learn and practice the SQL Statements that every developer needs to retrieve and update data in a SQL Database; design databases like a DBA and implement them with SQL scripts using SQL Server Management Studio or the MySql Workbench; gain professional skills such as using views, stored procedures, and functions.
Scrum	Scrum Framework: students dive into the Scrum software development framework, including roles and responsibilities, principles, artifacts, and events and time boxes, rules and customs.

Back-End Development

3 modules

C#, Java, web services and hosting

Object Oriented Programming (C#.NET, Java)	In this module, the student will learn the foundational concepts of programming. The student will learn how to use Visual Studio, C#, Entity Framework and the .NET library classes to develop Windows web applications along with Eclipse, Java, Hibernate, Spring and the Java library classes to develop Java web applications. How to use C# and Java to communicate to SQL databases directly. How to use object-oriented programming to correctly use business classes, encapsulation, inheritance, polymorphism, and composition along with interfaces the way they are productively used in the real world. At the end of the topics for these general-purpose languages, the students will do their capstone in both technologies.
Object Oriented Programming Technologies (EF/MVC/WebApi and Spring)	The student will be introduced to the MVC design pattern; how to start an ASP.NET application; how to use controllers, models, and WebApi to communicate in JSON. This module introduces EntityFramework Core, an Object-relational mapping tools to SQL Server. The module includes using LINQ to provide easy access to creating, modifying and reading SQL Databases. The student will also be introduced to the Spring Framework, specifically Spring Web. The students will build RESTful web services, coupled with Spring Data JPA, to return JSON responses utilized by the Angular front end. Students will also utilize Maven for project builds. We discuss entities, the annotations needed to map those entities to database tables and discuss Hibernate which is ORM library which sits atop JPA.
Hosting	The hosting topic reviews the multiple facets required to host a .NET application in the cloud. It includes: • Managing remote hosting via control panel • Creating and maintaining databases in the cloud • Operating and maintaining IIS web services • Web Applications versus Virtual Directories

Front-End Development

3 modules

Build and style the web interface

HTML/CSS/Bootstrap	The student will learn to build HTML pages with text, links, images, tables and forms plus use style sheets (CSS) along with Bootstrap for colors, backgrounds, formatting text and page layout.

JavaScript	In this module, the student will learn JavaScript the way it is most commonly used today, with the latest tools and most up-to-date techniques to start creating dynamic web apps. The student will also learn how to work effectively with JavaScript frameworks, functions and modern browsers plus how to use the most effective coding practices using HTML5.
Angular/Typescript	The student will learn the current version of Angular and Typescript to build Single-page applications (SPA) that access JSON services. The application will create services to make the AJAX calls that provide data that is data-bound to the user interface.

Outcomes and next steps

What students finish with, the support that gets them job ready, and how to get started.

Capstone Project

The Boot Camp Capstone project is a comprehensive software development project that each student is required to complete and get certified in order to graduate from the boot camp. This Project is a professional-level, full-stack, web application with an enterprise-level SQL database. It includes an object-oriented middle layer exposing by RESTful Web Services, and an Angular Single Page Application (SPA) web interface. Each student creates this project individually throughout the bootcamp writing every line of code themselves while working in and out of the classroom. Students will likely work 80 to 120 hours on this project and will leave the boot camp with this full stack application as evidence of the foundational development skills they've learned. The spec for this project is unique to MAX coding boot camps. It was developed by 3 senior instructors dedicating an estimated 235 hours so that virtually all the topics learned in the boot camp must be applied by students in the capstone project.

Career Services and Preparation

StrengthsFinder 2.0, Emotional Intelligence in the Workplace, Resume Preparation, Technical Interviewing and Acing the Behavioral Interview.

Workforce funding options

We coordinate national, state, and county workforce investment funding to help people upskill, reskill, and change their professional trajectory. Talk to an advisor today about workforce funding for individuals and organizations.

Ohio TechCred | Ohio IMAP | WIOA | GI Bill

Why a MAX bootcamp



Custom Curriculum

We have ready-to-deliver bootcamps in subjects like AI, Data Analytics, Software Developer and Agile Business Analysts. We can also create multi-week bootcamps from any of our available courses in our catalog.



Fully Immersive

Multi-week bootcamps allow students to dedicate consecutive days to being immersed in the curriculum, gain hands-on experience, and gain confidence in their capabilities.



Dedicated Time

Multi-week bootcamps give students a break from daily work tasks and allow the class to become their work. The dedicated time can create an epic skills shift that can support the promotion of a dedicated employee.



Instant Impact

Our bootcamp reviews are full of praise from employers for students' ability to immediately impact their organizations, and the investment in employees shows instant ROI while also building an upskilling culture.

Talk to an advisor about start dates and workforce funding. **513.322.8888 | maxtrain.com**