Codetalk WEB TECHNOLOGY VOCATIONAL PROGRAM

Curriculum Outline 2020

Technical Instruction Website Design **Project Work**

The Codetalk curriculum is designed to provide a foundation in the fundamentals of front end web development in an intensive 16-week program.

The intention is to prepare graduates for immediate placement in entry-level web technology positions.

Cultivating a resourceful, adaptive, growth mindset approach to learning & problem solving, daily instruction is augmented with lab time for practical group & individual projects.

Through the first 10 weeks focus is instruction in the fundamentals of web design & development, front end development, User Experience Design, Content Management Systems, QA, Agile, common tools & best practices.

Due to the dynamic nature of the technology sector, the material covered in this program is continuously evolving to keep us in line with industry trends and emerging technology.

Module 1 - Orientation & Computer Basics, Browsers

- Orientation & Introductions
- ♦ Mac OS, OS & File System Architecture & Organization
- ❖ Gmail, Google Drive, Task/Project Management. Tools configuration

Module 2 - Graphic Design Concepts & Web Design

- ❖ Graphic Design Principals. Balance, Space, Hierarchy, Relation
- ♦ Design Concepts I Overview. Website Review. Website Semiotics
- Social Media Usage. Pixelmator, image editing, image manipulation
- ♦ Design Concepts II White Space, Negative Space, Alignment
- Design Concepts III Color theory, Contrast, Usability. Typography
- Website layout, site mockup. UX Design Intro

Module 3 - Development Environments

- Unix Command Line
- ❖ GIT, GitHub Source Code Control | Version Control Concepts
- ❖ Node, MAMP, Web server setup and configuration
- ❖ Site Hosting, cPanel, Domains. Stack Architecture
- ❖ Wordpress installation & configuration. Themes & customization

Module 4 - HTML

- ❖ HTML basic elements and tags. Sublime Text Editor
- Semantic structure, Inline elements. Nested structure, divs, containers
- ❖ Inspect element, developer tools. HTML Article assignment

Module 5 - CSS

- CSS Syntax. IDs & Classes, Box Model, Inheritance
- CSS for positioning, CSS for Styling. Media Queries
- SCSS and preprocessors
- Flex, Float, Display inline-block & Best Practice Flex
- CSS organization and best practices
- Advanced CSS Pseudo Classes, Transitions, CSS Animations
- ❖ Forms HTML5 version of Project Form

Module 6 - UX UI IA

- ❖ UX Process. What is UX. UX Design Project
- Sketch workflow. Invision prototyping
- * Research, Goals, Personas, User flow, Analysis, Evaluation, Iteration
- Wireframing. Prototype Design, Usability
- ❖ Overview Interaction Design, Product Design, UI & GUI

Module 7 - Layouts

- * Responsive, mobile-first design and development
- ♦ Bootstrap 4.0
- ❖ Media Queries & Responsive Layouts
- Flex, Float, Inline Review
- Tools CDN, Font Awesome, CSS grids



Job Preparation Team Projects Agile Development

The primary goal of Codetalk is for graduates to attain full-time entry level positions/ paid internships in Front End Web Development, QA, Content Management, UX or a related tech field.

During the latter weeks, emphasis is on job prep. Career exploration workshops, interview coaching, job skills work, resume workshops & ongoing career coaching.

Focus on project development in Agile sprints, project management and collaboration in a team environment.

Students develop digital website portfolios showcasing individual & group client projects & design work. Each student enters a focused job search based on an individualized employment evaluation and plan.

Career Skills & Assets

Employment Plan Resume Digital Portfolio GitHub Portfolio Linkedin Profile

Behavioral Interviews
Technical Interviews
Resume Workshops
Employment Evaluation
Job Search Tracking
Job Placement Support

Module 8 - CMS

- ❖ Content Management Systems Fundamentals Client/Server Structure
- ❖ Wordpress, Drupal, Shopify, Magento & E-commerce solutions
- ❖ WordPress Admin, Dashboard, Themes, Templates, Local Installation
- ❖ WordPress Custom Theme Development, Child Themes, PHP
- Plugins, Widgets, Custom Content Types
- Collaborative team project building WordPress website

Module 9 - JavaScript, jQuery, Advanced Concepts

- Fundamentals JavaScript, Basic programming concepts
- ¡Query & Bootstrap Components. Plugins [SlickSlider, Masonry]
- Operations, Strings, String Operators, Functions, Arguments, Parameters
- ES6. Objects, Methods, Arrays of Objects, DOM Tree, Access, Nodes. Regex
- Events, Animations, Drawing, Interactive elements
- ♦ Introduction to API's and Frameworks. Fetch, Vue.js
- Web application design, virtual dom

Module 10 - Project Management & Agile

- ❖ Intro to Agile development & Project Management
- ❖ Collaboration, Accountability, Time management, Testing & Presentation
- Effective stakeholder communication
- ❖ SEO & Site Optimization
- ❖ Agile/Scrum, Sprint Planning & Project Development Management
- ❖ Group Projects individual roles and MVP. 3x 1 Week Sprints

Module 11 - QA

- QA, manual & overview of automated testing
- Practical QA group projects. Testing methodologies. uTest.
- Smoke tests, issue tracking, test cases,

Module 12 - Practical Group Projects & Portfolio Development

- ❖ Individual Portfolio Design & Development. Agile development
- ❖ Working Freelance- Client strategies, contracts, proposals, rfp's
- ❖ Group project wrap up & presentations. Presenting Work

Professional Development & Employment Planning

- Ongoing career counseling & coaching throughout 16-week program
- Employment Evaluation, Individual Employment Plan
- Career Exploration Workshop & Skills Assessments,
- ♦ Interview Preparation, Resume Workshops, Career Assets
- Mock Behavioral & Technical Interviews. Career Coaching, Networking
- Weekly Job Search Workshops

Supportive Program Components

- ♦ Mentorship program with our partners at Snap Inc.
- Industry guest instructors & speakers
- ❖ St Joseph Center Agency Services & dedicated Case Manager
- ❖ Mental Health Support
- Daily holistic health activities / Meditation

