

## Web Developer Using AI (WD)

The Web Developer Using AI diploma program at triOS is 62 weeks. It includes a 12-week internship.

This program contains a full suite of development technologies and topics including design (Adobe Illustrator, Adobe Photoshop, Adobe XD, UI/UX), frontend and backend web development (HTML, CSS, Linux/WordPress, JavaScript, Angular, React, PHP, and MySQL).

Mobile and web capstone projects included in the program will allow students to build a real-world mobile and web app that can be showcased to potential employers.

Courses in this program relate to 3 industry certification examinations. Students are provided with 3 certification exam vouchers to write the certifications they wish to pursue.

### Program Benefits

- ✓ Half Day Classes
- ✓ Job Placement Assistance
- ✓ Certification Exam Vouchers Included
- ✓ Qualified Instructors
- ✓ Adobe Creative Suite design software

### Here's a look at some of the courses included in this program:

#### Web Development Fundamentals

Graphical Design, HTML and CSS JavaScript, Linux Web Hosting and WordPress

#### Design & Development Fundamentals

UI/UX Design, Version Control and Collaboration, Swift Development, Java Development

#### Web Development

PHP and MySQL, Angular Development, React Development, Web Capstone

#### Internship

12 weeks

### Certification Paths:



## Employment and Wage Outlook for Careers in this field:



Employment Rate based on 2021 contactable triOS graduates employed in a related field within 12 months.

Source: workingincanada.gc.ca

NOC Code: 2174/21231, 21232, and 21234 - \*\*Wage data rounded down to the nearest dollar. Average wage doesn't reflect the starting salary but represents the middle value between lowest to highest wages. Local (or regional) income may vary. Last updated in Jan 2024.

### Career Opportunities

Software Programmer/Developer

Mobile Programmer/Developer

Database Programmer/Developer

Internet Site Designer

Web Programmer

### Employers Who Have Hired triOS Grads



### Some Other Employers Are:

- CMiC Computer Methods International Corp
- Michael Garron Hospital
- Stealth Monitoring
- Peel Regional Police
- Long View Systems

**“My experience was great. Everyone was very helpful with helping me achieve my goals from start to finish!”**

-Katrina M., triOS  
College Graduate

# Web Developer Using AI (WD) + Internship

Diploma Program Length:

**62 Weeks**

NOC Code: 2173/21231, 2174/21232 & 2175/21234

Student Success Strategies **2 Weeks** Career Management

PHP and MySQL  
Angular Development  
React Development  
Web Capstone

**16 Weeks**

Graphical Design  
HTML and CSS  
JavaScript  
Linux Web Hosting and WordPress

**16 Weeks**

Internship

**12 Weeks**

UI/UX Design Version Control and  
Collaboration Swift Development  
Java Development

**16 Weeks**

## Program highlights include:

- Registered and approved diploma
- 3 Certification Exam Vouchers \*\*\*
- Practice Tests (where applicable)
- Career services
- Job search assistance
- Alumni program benefits

\*\*\*The courses within the program relate to 3 industry certification examinations. Students are provided with 3 certification exam vouchers to write the certifications they wish to pursue.

## Certification Paths:



## Admission Requirements:

1. Student has an Ontario Secondary School Diploma or equivalent, OR Is 18 years of age or older on or before the program begins AND can pass a qualifying test that has been approved by the Superintendent.\*
2. The approved qualifying test for this program is the Wonderlic test. A passing score for this program is 20.

\*Applicants from other Canadian provinces must be at least 19 years of age and a minimum of 1 year out of high school by the program start date and successfully pass an academic achievement test.

International Students: Please contact us for more detail regarding admissions requirements.

## Accreditation Policy:

Like all post-secondary institutions in Ontario, triOS College reserves the right to accept or deny advanced standing into its programs.

## Certifications:

Students who successfully complete this program will be eligible to write certification exams leading to the following designations: Adobe Photoshop Certified Professional, Adobe Illustrator Certified Professional, and Oracle Java Associate. These certifications are comprised of three (3) individual certification examinations. Students are provided with three (3) certification exam vouchers to write the certifications they wish to pursue.

### Note:

To support your learning, the following technology requirements are required for you to be successful in your program: a Mac Mini M1, 24" monitor, keyboard and mouse, Macbook Air M1 or equivalent.

In order to continuously improve our programs, triOS College reserves the right to modify programs at any time. Program delivery order may vary depending on the program start date. This diploma program may not be available at all campuses. The program may have additional reading weeks, depending upon the start date.

You can find our Key Performance Indicators (graduation rate, employment rate, etc.) at [www.triOS.com/kpi](http://www.triOS.com/kpi).

## How AI is Used in Technology Programs:

### What is AI?

Artificial Intelligence (AI) is an evolving technology that attempts to simulate human intelligence using computer programs. At the heart of AI is Machine Learning (ML), which correlates large amounts of data to learn the relationships between different data elements. AI and ML products can be used by both IT professionals and software developers to save time on certain tasks.

### How do IT professionals leverage AI on the job?

Most IT professionals use AI to obtain or generate information that they would have previously obtained online using a search engine, such as Google. This could include generating summaries for reports and documentation, generating scripts (e.g., PowerShell, BASH), and generating infrastructure configuration templates (e.g., Ansible playbooks).

### How do software developers leverage AI on the job?

Nearly all modern development tools now have AI-based auto-suggestion, code generation, and documentation abilities. Software developers can choose to autofill in certain lines of code, as well as generate the initial structure (called stub code) for a new program to give them a solid starting point for development. Additionally, software developers can leverage AI tools to add the necessary documentation to existing code to save time.

### How do we approach AI in our programs?

While AI can be used to save time, all AI-generated content must be reviewed in depth by someone with content expertise to ensure that it provides the necessary functionality, and in a way that adheres to corporate standards, security, and software/copyright licenses. Thus, you must first have a solid understanding of IT administration or software development to leverage AI effectively in those fields.

At triOS, we leverage AI to generate content throughout several courses in the program, but only where appropriate, and in ways that mimic the use of AI in the workplace. Additionally, all AI generated content is thoroughly reviewed before use to ensure functionality, security, copyright adherence, license compatibility, and quality. Students will not learn how to create new AI technologies; however, students will learn how to use existing AI tools where appropriate.

## Course Descriptions:

### Student Success Strategies

This course stresses the importance of developing non-technical skills to enhance personal, academic and career success. This includes understanding learning styles and honing practical study skills, such as memory, reading, note- and test-taking techniques. Personal exercises will focus on teamwork, setting goals and maintaining a positive attitude. Techniques for managing change, stress, and conflict will also be explored.

### Career Management

In this module, you will create and refine your résumé and LinkedIn Profile. You will write cover letters and learn the value of customizing cover letters to specific job postings. You will have the opportunity to apply this knowledge as you conduct a job search and write a cover letter tailored to an ideal job post. Through research, you will create a list of top employers and target current industry opportunities. You will learn about current methods for applying to job postings using technology. You will also gain an understanding of the job interview process, typical interview questions and possible responses, and expectations of both the interviewer and interviewee. In addition, you will engage in practical application of the interview process through roleplay. Topics such as negotiating salary, self-management, and on-the-job success for placements and postgraduate employment will be also covered.

### Graphical Design

Visual images, user interfaces, and other graphical art are an important part of nearly all apps and webpages today. This course introduces the concepts and techniques used to create and modify graphical art for use within software and on the web. Students will work with both bitmap based and vector-based graphical art formats, as well as generate art using AI tools.

### HTML and CSS

This course introduces the core concepts and procedures used to create websites. More specifically, students learn how to create the components of a website using HTML5, as well as provide a standardized layout of website elements using CSS3.

### JavaScript

JavaScript allows for a rich set of interactivity within the content on a website. Consequently, it is one of the most common programming languages used today. In this course, you will learn the core elements of the JavaScript programming language, use JavaScript to provide enhanced functionality within a website, as well as leverage AI tools to generate JavaScript stub code.

### Linux Web Hosting and WordPress

Most web servers in the cloud are hosted on the Linux operating system. In this course, students will learn the basic usage of the Linux operating system, as well as the configuration of the Apache web server on Linux. Additionally, students will use the Apache web server to host their own websites as well as the WordPress content management system.

### UI/UX Design

In this course, students learn how to design user interfaces for web and mobile apps to maximize both usability and user experience. Additionally, students learn how to leverage AI tools to simplify the creation of design prototypes.

### Version Control and Collaboration

Most software projects today use an agile development process to provide timely revisions to software. Additionally, most software projects use the Git system for version control and collaboration. In this course, students explore the various agile development and project management techniques that are common in the industry, as well as learn how to leverage Git, GitHub, and GitHub Copilot AI for code versioning and collaboration.

### Swift Development

In this course, students are introduced to object-oriented programming using the Swift programming language. More specifically, students will learn Swift expressions, collections, and types, as well as enumerations, protocols and generics.



## Java Development

In this course, students apply the object-oriented concepts from the Swift development course to the Java programming language. More specifically, students will learn Java data and control structures, as well as how to create both graphical and web-based Java applications.

## PHP and MySQL

This course introduces students to server-side Web development using the open-source PHP language. More specifically, students learn the structure of the PHP programming language, as well as use PHP to create data-driven websites that interface with MySQL, leveraging AI generated code where appropriate.

## Angular Development

There are many different JavaScript code libraries available today that provide a framework for developers when creating web apps. In this course, students will explore the structure of the Angular JavaScript framework, as well as use it to create web apps that implement a wide range of functionality, leveraging AI generated code where appropriate.

## React Development

In this course, students apply their knowledge of the Angular JavaScript framework to learn another JavaScript framework called React. More specifically, students learn how to leverage the React framework to create a rich set of functionality within web apps, leveraging AI generated code where appropriate.

## Web Capstone

In this capstone project, students create a custom web app, leveraging AI generated code where appropriate. This app must implement either the Angular or React JavaScript framework as well as leverage a PHP backend that stores information within a database. Mentoring and code reviews will be provided by instructors during the supervised lab portion of regular class time.

## Web Developer Internship

At the successful completion of the classroom hours of this program, you will be placed in a 240-hour internship at an outside organization. You will have the opportunity to apply your new and developed skills in a real-world environment. Hosts include small, medium, and large organizations that provide applications and web development services.