



Willis College

BUSINESS | TECHNOLOGY | HEALTHCARE

PRACTICUM GUARANTEED



Faculty of Technology

Software Developer – Mobile Applications

Total Program Length is **70 Weeks**

65 weeks of instruction, up to 5 weeks of breaks

Program Highlights

- Develop mobile/web and client server applications portfolio
- Learn to create, debug, troubleshoot, and maintain code and software systems
- Use software development tools such as Android Studio
- Learn the principles of Object-Oriented Design
- Develop solutions for mobile apps
- Learn project management
- Use of a laptop throughout the program
- Job placement assistance
- Career development services

Program Overview

The Software Developer – Mobile Applications program exposes students to the full range of computer background fundamentals and modern day, leading-edge software development technologies. Beginning with the basics of computer hardware and operating systems, students focus on the fundamentals of software development and work their way through concepts of programming languages. Working in both Windows and Mac environments and with a focus on algorithms and software architecture, students learn where software design and programming languages meet and develop critical problem-solving skills necessary to a career in the software development industry.

This program focuses on the essential principles and tools for an entry-level web/mobile developer position. These principles are taught using practical examples that are revisited in various scenarios to give students a comparative view from which they learn insight and intuition. Throughout the program, students engage in both individual and group projects which help them understand the various stages of the software development cycle process, where they will utilize techniques and tools employed by modern commercial software companies.

As part of the hands-on approach (applied to assignments and projects throughout the course), students gain a working knowledge of the various software methodologies in practice, ranging from the traditional waterfall strategy to several variations based on the Agile development model.



IS THIS PROGRAM RIGHT FOR YOU?

This program is an excellent fit for:

- Someone serious about pursuing a career in software development
- Someone interested in entering the IT field
- Someone looking for a lucrative, in-demand career

Software Developer – Mobile Applications Program Overview

Length: 70 Weeks

Essential Skills For IT Professionals

- Effective Learning
- Project Management I
- Introduction to Microsoft Windows & Mac OS
- Introduction to Computer Architecture
- Source Version Control

Hybrid Application Development

- HTML
- Cascading Style Sheets (CSS3) I
- Javascript Language
- Hybrid Mobile/Web Development
- PHP Programming

Mobile Development

- Android Development I – Logics and Algorithms in Java
- Android Development II – Data Structures, Storage, and Processing
- Android Development III – Design Development & Object-Oriented Programming
- IOS Development I – Introduction
- IOS Development II – Design Principles and UX
- IOS Development III – Advanced Development & Design
- Labs I
- Labs II

+
**WILLIS COLLEGE IS
VERY PROUD TO BE A
FORTINET NETWORK
SECURITY ACADEMY
IN OTTAWA.**



Career Opportunities For Graduates

- Web Programmer/Developer
- Application Programmer/Developer
- Internet Site Designer
- Software Programmer/Developer
- Mobile Programmer/Developer
- Database Programmer/Developer
- iPhone Programmer/Developer
- Android Programmer/Developer
- Windows Phone Programmer/Developer
- Computer Programmer/Developer
- Business Application Programmer
- E-business Software Developer
- Programmer Analyst
- Systems Programmer

Salary Information

NOC CODES: 2174, 2283

\$38.46 (\$/hr) Ontario Base Average Wage

\$36.06 (\$/hr) Ontario Base High Wage

source: noc.esdc.gc.ca

Course Details

Introduction to Effective Learning

Students learn to establish appropriate learning expectations and the skills necessary to understand and build high-performance college and career skills and behaviours. This course introduces various concepts in career and study planning and how to effectively manage personal resources to achieve career and academic goals.

Introduction to Computer Architecture

This course introduces the basic building blocks for understanding the critical components of analog and digital electronics and their roles in modern digital systems.

Introduction to Microsoft Windows & Mac OS

This course provides students with a variety of computer skills that will be useful throughout the remainder of their education and into their lives beyond school. The emphasis is placed on learning to use tools that will be most useful to complete work for other modules. The main goal is to teach students to navigate through the main component of operating systems.

Project Management I

This course introduces the foundation and the environment of Project Management with an overview of various topics that serve as a foundation for further study of Project Management. Project Management life cycle phases are demonstrated through concepts, strategies, and best practices.

Introduction to Source Control Systems

This course provides students with the background and common concepts of various source control systems currently active in the software industry. Students learn the basic functionality of Git version control system. Focus rapidly progresses to the Git for a working understanding of the basics.

HTML

This module provides students with the background and common concepts of various industry markup languages currently active in the software industry. Focus rapidly progresses to the Hypertext Markup Language (HTML) for a working understanding of the basics.

Cascading Style Sheets (CSS3) I

This module provides students with a working understanding of the industry-standard CSS3 style sheet language. Building on their prior HTML knowledge, students learn and apply a broad range of styling guidelines and techniques found throughout mobile and web applications.

JavaScript Language

This course provides students with a working knowledge of the key concepts found in the JavaScript programming language. In conjunction with their HTML and CSS background, students learn how to implement JavaScript to add dynamic data and behaviour to web content pages.

PHP Programming

This course provides students with a working knowledge of the PHP programming language. Concepts from the Hybrid programming module is leveraged to accelerate common programming principles as well as reinforcing the concepts learned in the HTML, CSS, and JavaScript modules.

Android Development I – Logics and Algorithms in Java

This course introduces students to the fundamentals of algorithms and program control constructs using the Java programming language. Focusing on basic programming principles, students learn to use pseudocode and flowcharting techniques to think through, notate, and code logical solutions in Java.

Android Development II – Data Structures, Storage, and Processing

This course introduces students to advanced concepts around complex data structures and associated algorithms. Further reinforcing programming and debugging skills in Java for Android, concepts from Android Development I are extended to include these advanced concepts in structured data and their roles in applications.

Android Development III – Design Development & Object-Oriented Programming

This course leverages off the concepts and environments of the previous programming courses to move students deeper into the design concepts surrounding modern object-oriented methodologies. Continuing with the Java and Android Studio for reference and utilization, students further develop their design, development, and documentation skills through hands-on practical experience with the fundamentals of classes and objects.

Hybrid Mobile & Web Development

This course introduces students to advanced concepts of building web and hybrid mobile apps. Further reinforcing programming and debugging skills in Typescript, concepts from the Basic Javascript module will be extended to include these advanced concepts in structured data and their roles in applications. This course focuses on developing multiplatform mobile applications using the Web technologies (HTML5, CSS, and Javascript).



iOS Development I – Introduction to Mac & Development Tools

This course introduces the Mac OS, basic Swift, Xcode IDE, and Playground. Students gain hands-on experience with the Mac platform and development tools.

iOS Development II – Design Principles and UX

This course introduces students to the distinctive design principles that define the iOS user experience. Students build a responsive UI and add privacy to custom-rich notifications. This course covers iOS design, including gestures and animation.

iOS Development III – Advanced Development & Design

Students continue to discover the distinctive design principles that define the iOS user experience. Topics covered include networking, APIs, and third-party library dependency managers. Students get hands-on experience with the Mac Command Line and Terminal, Cloud-Based Backend, and persistent storage solutions. Students further develop their design, development, and documentation skills through hands-on practical experience and gain a hands-on understanding of the technology.

Labs I & II

Students participate in tasks and assignments which reinforce the acquired skills and knowledge throughout the program. An emphasis is placed on team building and meeting goals and deadlines.

Career Management

Our Career Management program introduces and allows students to apply the most effective strategies to achieve employment in the career of their choice. Topics that are covered include effective job search strategies, cover letter and strategic resume writing, effective interviewing skills, and interview preparation.

Practicum

Each student could perform or job shadow at their placement a combination of the following activities: developing solutions in the client-server programming environment, using HTML 5 content markup standards, using CSS3 styling language standards, using JavaScript language, using Java application development in a software app, using PHP software, debugging software, demonstrating quality assurance in the software environment, using Design Patterns in multiple programming languages, using both Microsoft Windows and Linux operating systems for software development apps, understanding android application development, being prepared to use notation techniques and tools for software artifact documentation, using skills to work well with others and exhibiting professional demeanour in the workplace, and understanding an organization's value by keeping information confidential.

Industry Certifications:



FOCUSED ON YOUR EMPLOYMENT SUCCESS FROM DAY ONE

WILLIS COLLEGE



The Admission Process

We have a simple, helpful process to admit students into our diploma programs. Our goal is to understand your personal objectives and match the best program to your interests and aptitude.

1. Meet with an admissions advisor.
2. Review program entry requirements.
3. Finalize financing and registration.
4. Start training towards your new career.

Note: This process applies to Canadian residents only. If you are an international student, please follow the International Student Application Process detailed on our website or contact info@williscollege.com.

Admission Requirements

To apply, you must possess ONE of the following:
Grade 12 (Secondary School Diploma) or GED equivalence or Willis College Entrance Assessment. If you are a Mature Student, you can gain admittance by writing a free high school equivalency test.

Note: Students with foreign credentials should be tested to establish literacy in the English language, regardless of whether or not their documents have been translated/compared.

Graduation Requirements

Willis College diplomas or certificates are only granted to students who successfully complete all courses/subjects and meet all financial requirements of the program. An overall average greater than 70% must be attained. The minimum Standards of Satisfactory Scholastic Progress set out in our Student Policy Guide must be met, along with all financial commitments and obligations of the program.

Employment Services

At Willis College, our success is your success! Our priority is to prepare you for success so that when you graduate, you can get the job you have always wanted. Our Career Services team makes it easy to transition into the workforce. From your first visit to Willis College, right up to when you start your new and exciting career, we will guide you every step of the way. This includes Resume Writing Techniques, Interview Techniques, Career Search Assistance, Exclusive Willis College Career Fairs, and Exclusive Partnerships with employers who hire our graduates.



WHY WILLIS COLLEGE?

- Canadian leader in post-secondary education since 1866
- Diploma and certificate programs which include internships and practicum placements
- Programs engage with real employers, in relevant and career-related projects
- Industry-recognized certifications
- Financial aid may be available to those who qualify
- Access to multi-vendor Willis CyberSecurity Academy
- Access to Pearson VUE Test Centre
- Specialized and job-ready skills training for careers that are in demand
- Career management seminars
- Certified and experienced instructors with practical experience
- Small class sizes with frequent program start dates
- Why Willis College? Because you're ready to make a change for the better

OTTAWA

Suite 20 - 1200 St. Laurent Blvd.

Ottawa, ON K1K 3B8

Tel: 613.233.1128

Toll-free: 1.877.233.1128

ARNPRIOR

39 Winners Circle

Arnprior, ON K7S 3G9

Tel: 613.623.1114

Toll-free: 1.855.853.2260

WINNIPEG + ONLINE

464 Hargrave St.

Winnipeg, MB R3A 0X5

Tel: 204.956.4708

Toll-free: 1.866.579.4154

NOTE:

To continuously improve our programs, Willis College reserves the right to modify programs at any time. Not all programs and services are available at all campuses; please check the campus near you.



150 YEARS OF CAREER TRAINING EXCELLENCE

Due to our commitment to student success, we often see families from each generation come and attend Willis College. Let us offer that same commitment to you!

Deciding which school to attend is a big decision. Being 100% Canadian-owned and operated, and with 150 years of public trust, we know that your success is our success.

Our friendly and knowledgeable staff will help you every step of the way, from the first time you visit Willis College to when you finally get that career you have always wanted. We provide the necessary career-skills training in business, technology, and healthcare to help you achieve your career goals. Please contact us regarding program availability at each campus.