

# PROGRAMMER ANALYST – FULL STACK JAVA DEVELOPER (LCA.CK)

**Duration** | 12 Months (Local Students)

**Salary** | Average annual salary is \$78,000 in Canada

## MONTREAL COLLEGE IT

Ministère de l'Éducation et de l'Enseignement supérieur  
Permit No. 693570



### Program Overview

With the world becoming a digital village, every business wants their space in it to make their presence known. And it begins with having a website. Full stack Java development is building dynamic web applications & websites with a combination of server-side & client-side technologies, along with databases.

This program enables you to become a skilled full-stack Java developer as you begin learning the programming constructs and fundamentals in Java Core. Later you learn to create responsive web layouts using HTML, CSS, JavaScript. Also, you shall integrate it with database (Oracle) with SQL fundamentals & DAO design patterns. Furthermore, you shall build a web application using Spring MVC framework and learn to use Hibernate ORM tool. Also, you get to learn the fundamentals of Webservices – RESTful & SOAP architectural styles. Finally, your learnings are solidified with a capstone project which helps in building your portfolio.

### Course Outline

#### 1| Fundamentals of Programming

- Programming logic, constructs in Java
- Introduction to Object-Oriented Programming (OOP)
- GIT

#### 2| Introduction to Java Core

- OOPs in Java
- Packaging, Exception Handling, I/O, Networking, JDBC

#### 3| Introduction to Databases and DAO Pattern

- SQL fundamentals
- DAO design patterns

#### 4| Front End Development

- HTML, CSS, JavaScript
- Responsive Web pages

#### 5| Advanced Java Programming on Server side: JAVA EE

- Servlets & JSPs

#### 6| Java Persistence API with Framework Hibernate

- Hibernate ORM – File, Inheritance, Collections, Associations
- HQL – Hibernate Query Language

#### 7| Spring Framework for Enterprise Applications

- Spring Container, Dependency Injection, JDBC Template
- Web Application project demonstrating Web MVC framework

#### 8| Web Service Development

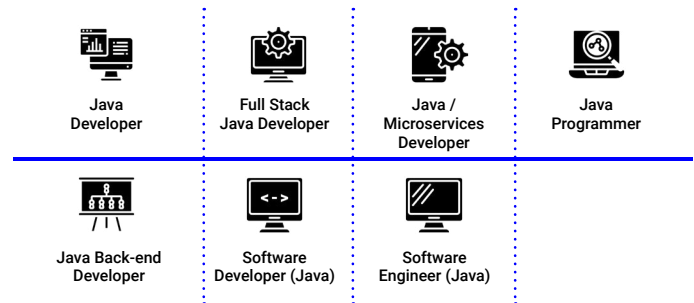
- RESTful & SOAP Web Services development
- Microservices

#### 9| Career Development

- Building Resume, CV & LinkedIn profiles
- Cover letters & interview preparation skills
- Understanding Canadian job market

#### 10| Project

### Career Options



### Industry Overview

- 1| According to BMC survey results, Not surprisingly, demand for Java Developers is expected to grow between now and 2024 by up to 19%.
- 2| With over 20 years as one of the mainstays in programming languages, Java's past is significant, which leads the industry to question its longevity.
- 3| Industries like Information Technology, Arts, Design and media, Retail, catering and bar work, Marketing, PR and sales - are looking out for professional Web App Developers.

### Skills you Acquire

- Designing, implementing, and maintaining Java applications that are often high-volume and low-latency, required for mission-critical systems.
- Delivering high availability and performance.
- Contributing in all phases of the development lifecycle.
- Writing well-designed, efficient, and testable code.
- Conducting software analysis, programming, testing, and debugging.
- Managing Java and Java EE application development.
- Ensuring designs comply with specifications.
- Preparing and producing releases of software components.
- Transforming requirements in user stories into code (features) in Agile environment development teams.
- Support continuous improvement:
  - Investigating alternatives and technologies
  - Presenting for architectural review

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Designated learning institute(DLI) 019338447682

### Why Choose MCIT?

- 1 Industry Focus**  
Our curriculum is solely based on the latest industry trends to make sure you are equipped with the right skillsets.
- 2 Project Based Learning**  
Your learning is solidified with a project at the end of the course to make you job-ready. This project is implemented under the guidance of your instructor
- 3 Get trained by Domain Experts**  
The courses are taught by industry experts who have got years of experience in respective domains. This way you shall be learning key concepts from people who have already solved similar problems
- 4 State of the Art Infrastructure**  
Every student gets a dedicated VM (Virtual machine) as they join this program to serve their needs in terms of intense computation, access from anywhere.
- 5 Strong Alumni Network**  
You are not alone for you have a 5000-member strong Alumni network as you study at MCIT
- 6 Learn while you work | Earn while you learn**  
Learn new skills to take your career to next level while continuing your work due to our flexible schedules.

### Financial Aid

- 1 AFE Loan**  
Full tuition fee could be covered under AFE loans provided by Quebec Government.
- 2 Scholarship**  
On a case-by-case basis, local students can reach out to private bursaries to receive anywhere between \$500 CAD - \$2000 CAD.

**Note:** For further information about financial aid, please speak to any of our advisors.

### Career Support Services

The Career Center at MCIT is designed to offer students and alumni the opportunity to learn about the Canadian job market and how to sell their skills and experience to successfully find job opportunities. You shall be assisted in learning:

- 1 Canadian customs**
  - 2 The art of Networking**  
How to build a professional network
  - 3 Cover Letters Writing**
  - 4 CV & Resume Writing**
  - 5 Internship Preparation**
  - 6 Job Search Checklist**  
Exploration, Preparation, Implementation
  - 7 LinkedIn Profile Building**
  - 8 Interview Preparation**
- You'll be Job-ready!**

### Learning Methodology

Learning Methodology is the central mechanism for learning advancement. It's the core that drives all your expertise and knowledge to attain professional success.

