



HANDBOOK

iCET Certified Developer Program



iCD
iCET CERTIFIED DEVELOPER

VISION

To be the leader in global software education sector, by connecting individuals with the knowledge, skills, and intelligence to excel in the global software engineering industry.

MISSION

Our mission is to provide comprehensive software engineering education and industry-oriented training, equipping students with the technical expertise, practical experience, and professional competence required for successful careers in the software industry.

VALUES

01. Excellence
02. Innovation
03. Integrity
04. Collaboration
05. Student-Centric Approach



A JOURNEY OF INNOVATION

At iCET - Institute of Computer Engineering Technology, we stand as a distinguished leader in the realm of software education and training in Sri Lanka. Founded by the visionary Dr. Niroth Samarawickrama, our mission is unwavering - to empower students with the right mindset and skillset, positioning them for superior and competitive roles within the Sri Lankan ICT sector, adorned with commensurate remunerations.

Rooted in a rich legacy of educating over 13,000 ICT enthusiasts, Dr. Samarawickrama's vision transcends academic boundaries. His commitment to channeling foreign income into the nation by nurturing Sri Lanka's youth is mirrored in our meticulously designed programs and courses, rigorously tailored to meet the ever-evolving demands of the contemporary job market.

Our pledge is to deliver the pinnacle of education and training quality. Our distinguished team of educators and trainers brings a wealth of experience, dedicated to facilitating students in their journey towards achieving their educational and career aspirations. We embrace state-of-the-art equipment and cutting-edge teaching techniques, ensuring our students embark on a learning journey that is second to none.

At iCET, our core values of excellence, innovation, integrity, collaboration, and a student-centric approach drive every facet of our operations. We envision a future where every student emerges from our programs fully prepared for industry challenges, poised to contribute to the ICT sector with the latest industry trends and practices. Our relentless pursuit of continuous development is a testament to our commitment to nurturing talent, fostering growth, and achieving excellence in ICT education and training.

We invite you to explore our comprehensive offerings, each meticulously crafted to empower students to thrive in the dynamic landscape of the ICT industry. Your journey at iCET begins here, where excellence is the norm, innovation is our mantra, and success is your destination.

A MESSAGE FROM THE FOUNDER

Dear Students,

I am delighted to introduce the iCET Certified Developer (iCD) program, a testament to our commitment to empowering aspiring software developers like you. In the world of technology, knowledge alone is not enough; hands-on experience is paramount.

The iCD program is designed with one goal in mind: to help you seamlessly transition from your academic journey to a fulfilling career in software development. We understand that university studies can sometimes leave gaps in your practical skills, and that's where iCD steps in. Over eight months, you will delve into the intricacies of software development through a series of industry-level projects.

Whether you opt for the online or physical program, you will find a nurturing environment that encourages growth and exploration. Many of our graduates have successfully balanced their university studies while excelling in the iCD program, proving that dedication and hard work can unlock limitless possibilities.

As you embark on this transformative journey, remember that the software industry is ever-changing, and adaptability is key. The skills you acquire here will not only enrich your academic life but also position you as a sought-after professional in the software world.

Welcome to iCD, where we shape future software developers ready to conquer the challenges of tomorrow.

Best regards,

DR. NIROTH SAMARAWICKRAMA
FOUNDER,
INSTITUTE OF COMPUTER ENGINEERING
TECHNOLOGY (ICET)



A MESSAGE FROM THE CEO

Dear Students,

I am thrilled to introduce you to the iCET Certified Developer (iCD) program. In today's rapidly evolving tech landscape, the demand for skilled software developers is higher than ever. At iCET, we understand the challenges you face as university selected candidates or undergraduates looking to enter the dynamic world of software engineering.

The iCD program is meticulously designed to bridge the gap between your academic knowledge and the practical skills demanded by the software industry. Over eight intensive months, you will embark on a journey of hands-on learning, tackling real-world projects that mirror industry standards. Whether you choose the online or physical pathway, our goal remains the same – to equip you with the skills and confidence to excel in software development.

As you navigate your university studies, the iCD program will be your guiding light. The projects you complete here will not only enhance your understanding but also open doors to exciting career opportunities. Your success is our mission, and we are committed to empowering you with the tools you need to thrive in the software industry.

Welcome to the iCD program, where your journey to becoming a certified software developer begins.

Warm regards,

SAMILA SENANAYAKA
CEO,
*INSTITUTE OF COMPUTER ENGINEERING
TECHNOLOGY (ICET)*

ABOUT iCD

In a world driven by technology, where innovation shapes our future, the need for skilled software developers has never been more profound. The iCET Certified Developer (iCD) program is your gateway to mastering the art of software development and carving a path to success in this dynamic field.

Designed with a focus on hands-on learning, iCD is tailored for graduates and anyone seeking to bridge the gap between academic knowledge and industry-ready skills. We understand that while your educational journey equips you with essential theories, real-world application is the key to thriving in the competitive software landscape.

Spanning eight transformative months, iCD immerses you in a world of practical experience. You won't just learn; you'll create. Our program includes at least four industry-level projects that mirror the demands of real software development. You'll dive deep into coding, problem-solving, and teamwork, gaining invaluable insights that textbooks alone can't provide.

We recognize that every student's journey is unique. That's why iCD offers flexibility, allowing you to choose between online or physical classes. Whether you're a full-time employee or balancing studies and work, iCD can fit seamlessly into your life, ensuring you have the tools to succeed.

Many of our successful graduates have found that iCD not only enhances their understanding of software development but also empowers them to excel in their university projects.

As you embark on your journey with iCD, you're not just acquiring skills; you're joining a community of passionate learners and future software professionals. The software industry is ever-evolving, and iCD will prepare you to adapt and thrive in this dynamic field.



LEVEL I

MASTERING PROGRAMMING & WEB DESIGNING CONCEPTS

OBJECTIVES

- To provide students with a comprehensive understanding of programming fundamentals.
- To familiarize students with the Java development environment and basic syntax.
- To equip students with the skills to write programs using variables, operators, and control statements & web technologies.

OUTCOME:

- Solid foundation in programming concepts and writing programs.
- Understand and use data types variables, operators, and control statements.
- Students will be able to create and manipulate arrays and strings in Java.
- Ability to create dynamic web pages using web technologies.

MODULE 1

Programming Techniques and Computer Programming

Topics:

- 1.1 Introduction to Compiler, interpreter architecture and language design
- 1.2 Data representation in computer memory
- 1.3 Data types, conversion and casting in Java
- 1.4 Operators and operator precedence
- 1.5 Working with variables and methods in Java
- 1.6 Java flow control (Loops Conditional Statements & Recursive Methods)
- 1.7 Methods in Java
- 1.8 Data algorithms using Arrays & Multi-Dimensional Arrays in Java
- 1.9 Course Work

MODULE 2

Introduction to Web Technologies

Topics:

- 2.1 Introduction to the Internet & web application architectures
- 2.2 HTML5 and CSS3
- 2.3 Styling web pages with CSS Frameworks (Bootstrap, Tailwind CSS)
- 2.4 Web App programming with JavaScript
- 2.5 jQuery and fetch API for Web Development
- 2.6 Responsive Web Designing with CSS Media Queries
- 2.7 Working with Restful APIs
- 2.8 Final Course Work

LEVEL 2

MASTERING OBJECT ORIENTATION, DB MANAGEMENT & DESIGN CONCEPTS

OBJECTIVES

- To provide students with an understanding of object-oriented programming concepts.
- To equip students with skills to write programs using classes and objects. To familiarize students with inheritance, polymorphism, encapsulation and abstraction.
- To empower students with knowledge on Database Management System.

OUTCOME:

- Students will have a solid foundation design patterns in computer programming.
- Ability to work with classes and objects in Java.
- Adapting inheritance, polymorphism, encapsulation and abstraction concepts in programming.
- Students will be able manipulate data in a Database Management System.

MODULE 3**Object Oriented Programming and Concepts****Topics:**

- 3.1 Encapsulation
- 3.2 Abstraction
- 3.3 Polymorphism
- 3.4 Inheritance
- 3.5 Cohesion and Coupling
- 3.6 Design patterns in programming
- 3.7 Data Structures and Algorithms
- 3.8 Course Work

MODULE 4**Database Management System & System Design****Topics:**

- 4.1 Manipulating data with SQL Queries.
- 4.2 Relational Database System (MySQL)
- 4.3 Entity Relation Diagram (ER)
- 4.4 UML Diagrams
- 4.5 Database performance tuning and Query optimization

LEVEL 3**ADVANCED PROGRAMMING & PROJECT DEVELOPMENT****OBJECTIVES**

- To provide students with understanding of database integration
- To familiarize students with JDBC (Java Database Connectivity) and connecting Java applications to databases
- To equip students with knowledge on Software Development Methodologies
- To implement programming architectures and design patterns

OUTCOME:

- Comprehensive understanding and practical know-how of database integration.
- Ability to connect Java applications to database using JDBC.
- Solid understanding of error handling and debugging techniques.
- Ability to visualize and implement Programming Architectures and Design Patterns.

MODULE 5**Java Database Programming , APIs and Frameworks****Topics:**

- 5.1 Java Database connectivity and Transactions
- 5.2 Object Relation Mapping - ORM
- 5.3 Multi Threading Programming in Java
- 5.4 String API and Java Collection Frameworks
- 5.5 Java Remote Method Invocation - RMI
- 5.6 Modern UI Designing with JavaFX
- 5.7 Final Course Work

MODULE 6**Programming Architectures and Design Patterns****Topics:**

- 6.1 Introduction to Programming Architectures
- 6.2 Model-View-Controller (MVC) Architecture
- 6.3 Layered Architecture
- 6.4 Client-Server Architecture
- 6.5 Final Course Work

MODULE 7**Effective Software Development Practices****Topics:**

- 7.1 Software Development Life Cycle (SDLC)
- 7.2 Software Requirement Engineering
- 7.3 Software Design Principles and Techniques
- 7.4 User interface and User Experience Engineering
- 7.5 Business Process Analysis and Documentation

LEVEL 4

ENTERPRISE APPLICATION DEVELOPMENT

OBJECTIVES

- Proficiency in API Development and Document-Oriented Database Management
- To familiarize students in creating dynamic and interactive web pages.
- To equip student with the skills to create Mobile Applications.

OUTCOME:

- Students will be able to practically develop apps using client-server architecture.
- Students will be able to work with Document-Oriented Databases.
- Knowledge in practically development Mobile Applications.
- Students will be equipped with the knowledge of Project Documentation and Communication.

MODULE 8

API Development & Advanced Web App Development

Topics:

- 8.1 Document oriented Database Management (Mongo DB)
- 8.2 Rest API Development with NodeJS & Express
- 8.3 Front-End Development using ReactJS
- 8.4 Cross-Platform Mobile Application Development
- 8.5 Building robust and scalable Micro-services using Spring Boot
- 8.6 Introduction to Cloud infrastructure Engineering
- 8.7 Final Course Work

MODULE 9

Project Management & System Architecture Design

Topics:

- 9.1 Project Management Methodologies
- 9.2 Software Testing and Quality Assurance
- 9.3 Enterprise Software Architecture Design
- 9.4 Software Project Economics
- 9.5 Emerging Trends & Technologies

SUCCESS STORIES



In 2020, I completed my degree in Physical Science; however, my true passion was to enter the field of Software Engineering. Following the completion of my university studies, I enrolled in the iCD training program at iCET. In just four months into the iCD program, I seized an opportunity to step into the software industry. The invaluable industry-level knowledge and training I gained through the iCD program were instrumental in my success. The iCD program shines as an outstanding training program tailored for those transitioning into the software engineering industry, whether you're a non-IT graduate like me or a professional from a non-IT background.

Athula Bandara

Software Engineer, Bitzify
University of Rajarata



As a graduate with an Electrical Engineering degree from Moratuwa University, I understand the challenges of transitioning to a career in Software Engineering. However, I want to share my personal experience with Dr. Niroth Samarawickrama's iCD program at iCET, which was truly a game changer for me.

Thanks to the iCD Program, I was able to enter the software industry in just eight months. What sets this program apart is its comprehensive syllabus, which starts from the basics and gradually introduces more advanced topics. Even though my degree was in a different field, I seamlessly adapted to the industry, all thanks to the practical industry-level projects I undertook during the training program.

I've explored various online courses and YouTube tutorials before, but none of them compare to Dr. Niroth's teaching approach when it comes to Java. For anyone contemplating a career switch to Software Engineering, I wholeheartedly recommend iCET's iCD program as the ideal choice.

Omal Cooray

Senior Data Engineer, Circles Life
University of Moratuwa

PAYMENT DETAILS

We understand that financial considerations are an important aspect of your decision to enroll in the iCD - iCET Certified Developer Program. To provide flexibility and accommodate different payment preferences, we offer two payment options for your convenience:

ONE TIME PAYMENT

Total Course Fee Rs. 150,000.00

Special Offer 20% Discount
(for one time payment)

Amount Payable Rs. 120,000.00

INSTALLMENT PLAN

Initial Payment Rs. 100,000.00
(Before Course Commencement)

Remaining Payment Rs. 50,000.00
(Within 60 days after Course Commencement)

Choose the option that suits you best and secure your enrollment in the iCD program. Please note that timely payment is essential to ensure uninterrupted access to the program's resources and benefits.

We accept Bank Transfers to the Account details provided below.



Bank : Bank of Ceylon (7010)
Branch : Panadura - 007
Account Name : Institute of Computer Engineering Technology (Pvt) Ltd.
Account No : 90257659



Bank : Nations Trust Bank (7162)
Branch : Panadura - 017
Account Name : Institute of Computer Engineering Technology (Pvt) Ltd.
Account No : 100170008609

REFUND POLICY

At iCET, We Maintain a Strict **NON-REFUNDABLE POLICY**. Once payment is made and registration for any of our programs is completed, refunds **WILL NOT BE ISSUED** under any circumstances.

For payment confirmation, we kindly request you to send us a photo of the deposit slip or a screenshot of the payment confirmation screen along with your name and NIC to our Student Coordinator.

For further inquiries or assistance, please call or email us.

✉ info@icet.lk

☎ +(94)705 805 805



CONTACT US

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