



# Software Testing & Quality Assurance

# **Program Admission Arrangement**

## Who May Apply?

 All University Graduates especially Computer Science and Engineering Graduates and Applicants willing to expand their skills and knowledge.

## **Prerequisites**

Candidates will have to complete the following prerequisite courses to join our program:

- · An Introduction to Programming https://www.coursera.org/learn/intro-programming
- Computer Programming Tutorial <a href="https://www.tutorialspoint.com/computer\_programming/index.htm">https://www.tutorialspoint.com/computer\_programming/index.htm</a>
- Intro to SQL: <a href="https://www.w3schools.com/sql/default.asp">https://www.w3schools.com/sql/default.asp</a>
- Introduction to software testing <a href="https://maharatech.gov.eg/course/view.php?id=2">https://maharatech.gov.eg/course/view.php?id=2</a>
- Introduction to ISTQB https://maharatech.gov.eg/course/view.php?id=34
- Testcase Writing And Bug reporting <a href="https://maharatech.gov.eg/course/view.php?id=4">https://maharatech.gov.eg/course/view.php?id=4</a>
- Introduction to web fundamentals <a href="https://maharatech.gov.eg/course/view.php?id=36">https://maharatech.gov.eg/course/view.php?id=36</a>
- · ITI values that could be found here: https://iti.gov.eg/about-us

#### **Selection Process**

- Phase 1: IQ and Problem-Solving exam | English exam
- Phase 2: Technical Exam
  - Computer-based technical exam in the field of your interest
- Phase 3: Technical Interview
  - Those applicants would be discussing with the interviewing panel their pre-work "Before You Apply" in a one-to-one interview
- · Phase 4: Interpersonal Skills Interview
  - Those how pass phase 3 will be promoted to this interview

## **Delivery Approach**

- 20% Self-paced | 40% Online | 40% Guided Practices
- Project Based Focused Journey
- · Your Mentor supports throughout all the learning journey

## Students' Deliverables

· Each student must deliver at lest ONE freelancing job and an international certficate based on his track



# **Software Testing & Quality Assurance Track**

## **1** Programs Offered

- **☑** Professional Training Program:
  - Software Testing & Quality Assurance
- **☑** Intensive Code Camps:
  - Software Testing Foundations
- **☑** Undergrads Summer Camps
- **☑** Tech Ambassador
- **☑** Online Services
  - ☑ (MaharaTech, ITI Tech Leap, Coursera)

## 2 Industry/Academy Stakeholders

- ISTQB International Board
- Test Automation University

## **3** Targeted Outcome

- Employability
  - Vodafone Egypt
    VOIS
    Drange Egypt
    InstaBug
    Etisalat Misr
    Expleo
    Swift Act
    Basata
    Fawry
    Aman
    Valeo
    E-tax

## 4 Certifications

- ISTQB-CTFL
- ISTQB-Agile
- ISTQB-Mobile
- ISTQB-Performance
- ISTQB-AI
- ISTQB-Automotive
- ISTQB-Security

## **5** Graduates Job Profiles

- Software Development Engineer In Test (SDET)
- · Mobile Testing Engineer
- Performance Testing Engineer.
- Security Testing Engineer
- Al Testing Engineer
- API Test Engineer
- Automotive Testing Engineer



# **Software Testing & Quality Assurance Track**

## **Program Content Structure**

#### **Fundamental courses**

- Track Orientation Workshop
- Introduction To Programing
- Object-Oriented Programming Concepts
- Database Fundamentals
- Data Structures and Algorithms
- Operating Systems Fundamentals
- Computer Networks Fundamentals
- Agile Software Development Methodologies
- Linux Operating System
- HTML5 &CSS
- Java Programming
- Python for SW Testers

#### **Life Skills Courses**

- Communication Essentials for Professionals
- High Impact Presentations
- Job Seeking Skills
- Professional Demeanor (Workshop)
- Best Practices For Remote Working (Workshop)
- Progressive Teamwork and Leadership Skills (Workshop)

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- Software Development Engineer In Test (SDET)
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## **Core Testing Courses**

- Manual Testing Courses
  - software Testing concepts & Techniques
  - ISTQB Foundation Software Testing Certification
  - Effective Test case and bug report writing techniques

## Web Application Dev &Testing Courses

- Developing & Testing JavaScript
- Developing & Testing XML Technologies
- Developing & Testing .Net Applications
- Developing &Testing Database using Sql Server

#### Test Automation Courses

- Testing Analysis and Automation
- Web Performance Testing &ISTQB
- Mobile Applications Dev &Testing
- ISTQB Mobile Applications Testing
- API Development & Testing
- Dev-ops Testing
- Security testing
- ISTQB Foundation Agile Tester Extension Certification

## Software Quality Assurance & Process Improvements

- Software Quality assurance essentials
- Software Configuration management

## Embedded& Automotive Testing

- Introduction to embedded systems
- Testing Embedded software systems

#### Al in Software Testing

- Introduction to AI in Software testing-ISTQB
- Automotive ISTQB
- Testing workshops on different apps
- Problem Solving

#### Projects

- R&D with papers and prototypes with universities in the domains of
  - Al in testing
  - Automotive testing
  - Automation Testing

## **1100 Hours**





