Open-Source Applications Development

People Develop Countries… We Develop P.E.O.P.L.E.

Program Admission Arrangements

Who May Apply?

- **Graduates of: All University Graduates with prerequisites of having a first degree from a recognized university or institution of higher education with minimum degree of Good**

Prerequisites

These topics will be discussed with you in the interviews (Resources applicants can visit or study before interview)

- **Programming Fundamentals** at **ocw.mit.edu/courses/intro-programming/**
- **OOP Fundamentals** at **https://maharatech.gov.eg/course/view.php?id=2206**
- **Web Fundamentals** at **maharatech.gov.eg/course/view.php?id=36**
- **Linux Fundamental** at **https://maharatech.gov.eg/course/view.php?id=2155**
- **Database Fundamentals** at **maharatech.gov.eg/course/view.php?id=740**
- **ITI values** at **www.iti.gov.eg/Site/AboutUs**

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

- 75% face to face Learning| 25 % Online
- Common Software: Red Hat or Ubuntu Operating System

Students' Deliverables

- Each student must deliver at lest ONE **freelancing** job and complete the graduation project.

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1 Programs Offered

- ☑ **Professional Training Program:**
  - Open Source Applications Development
- ☑ **Intensive Code Camps:**
  - Full-Stack using Python
  - Full-Stack using PHP
- ☑ **Undergrads Summer Camps**
- ☑ **Online Services (MaharaTech, ITI Tech Leap)**

2 Industry/Academy Stakeholders

- RedHat Academy
- AWS

3 Targeted Outcome

- **Employability**
  - o Vodafone Egypt
  - o VOIS
  - o Orange Egypt
  - o Etisalat Misr
  - o Valeo
  - o ITWorx
  - o Bank Misr
  - o eTax
  - o MTS
  - o Giza Systems
  - o Fixed solutions
  - o Alhi bank
  - o Aman
  - o Cairo bank

4 Certifications (optional)

- Red Hat Certified System Administrator
- AWS Certified Cloud Practitioner
- MongoDB Associate Developer

5 Graduates Job Profiles

Full Stack Web Developer:
The primary responsibility of a Full Stack Developer includes designing user interactions on websites, developing servers and databases for website functionality

Backend Developer
Backend developers are responsible of building the core functionality and infrastructure that power web applications, ensuring they are robust, secure, and scalable using different opensource technologies.

Frontend Developer
A frontend developer specializes in creating responsive and interactive user interfaces using HTML, CSS, and JavaScript, collaborating closely with designers and backend developers to ensure seamless integration and optimal user experience

MEARN Stack Developer
The primary responsibility of a Full Stack Developer includes designing user interactions on websites, developing servers and databases for website functionality using MEARN stack technologies

Odoo Developer
An Odoo developer is responsible for customizing and implementing ERP solutions to streamline business operations

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Program Content Structure

Fundamental courses
- Track Orientation Workshop
- Agile Software Development Methodologies
- Client-Side Technologies
- Computer Network Fundamentals
- Data Structures and Algorithms
- Database Fundamentals
- HTML5 & CSS3
- Introduction to Programming
- Introduction to Software Engineering
- Object-Oriented Programming Concepts
- Operating Systems Fundamentals
- XML Fundamentals
- Freelancing

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

Core Courses
- Angular
- Apache Web Server
- Application Security Basics
- Bash Shell Script
- Cloud Computing and Dockers Fundamentals
- CSS Frameworks
- Design Patterns
- Developing Applications using Java Programming
- MongoDB
- MySQL Database
- Node.js
- Open-Source ERP Systems
- PHP CMSs
- PHP Programming
- PHP Web Frameworks
- Push and Pull Technologies
- Python Programming
- ReactJS
- Red Hat System Administration
- Ruby Programming
- Unit & Automated Testing
- Version Control Systems
- VueJS
- Web Services

Workshops
- Nest.Js
- Next.Js
- GraphQL

Soft Skills 6%
Fundamental Courses 33%
Core courses 61%