

DIGITAL EGYPT PIONEERS INITIATIVE
(DEPI)
PROFESSIONALS CATALOG
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Introduction

DEPI includes 6 technology tracks (specialties) that cover highly demanded jobs. Those tracks are:

1. SOFTWARE DEVELOPMENT
2. DIGITAL MARKETING & ART
3. AI & DATA SCIENCE
4. DATA ANALYTICS
5. INFRASTRUCTURE & SECURITY
6. Management & ERP

Each technology track offers training courses for technologies used by many companies in that specific track, and each course covers a potential job opportunity (job profile). The objectives of studying each job profile are

- Provide trainees with the necessary technical background and experience needed to excel in specific technologies that match trainee's capabilities and aspirations. This includes all the necessary prerequisites.
- Guide trainees on how to develop a professional and product quality module.
- Explain different aspects of the product development life cycle (planning, design, development, integration, and testing) that help trainees succeed in job market.
- Involve trainees in hands-on experience and training that deepen their understanding of the introduced technologies.

SOFTWARE DEVELOPMENT TRACK

The software track offers training courses for several web development technologies (frontend/backend) across different platforms, mobile development, cloud application development, DevOps, and software testing.

Software Development

1. DevOps Engineer
2. React Frontend Web Developer
3. Angular Frontend Web Developer
4. Mobile App Developer
5. Full Stack .Net Web Developer
6. AWS Cloud Specialist
7. Software Tester

SOFTWARE DEVELOPMENT TRACK

1. DevOps Engineer

A DevOps Engineer is responsible for smoothing the operation of a company's IT infrastructure. A DevOps Engineer's roles and responsibilities are a combination of technical and management roles. DevOps Engineers build and set up new development tools and infrastructure, implement integrations requested by customers, deploy updates and fixes, develop scripts to automate visualization, design procedures for system troubleshooting and maintenance, and optimize software development processes.

The technical study plan proposed for a DevOps Engineer is provided below:

| Job Profile Content |
|--|
| Prompt Engineering |
| DevOps Essentials & Perquisites |
| Configuration Management using Ansible |
| Using Git for DevOps |
| Containerization basics using Docker |
| Docker Advanced |
| Continuous Integration using Jenkins |
| Introduction to Kubernetes |
| Continuous Monitoring using Prometheus |
| Cloud for DevOps |
| Terraform |
| Application Deployment (Resource Dependencies,...) |
| web server configurations |
| Capstone Project |

SOFTWARE DEVELOPMENT TRACK

2. React Frontend Web Developer

This profile is equipped with comprehensive knowledge of web development essentials such as HTML, CSS, and JavaScript, and specialized in building React applications. With proficiency in Git and GitHub for version control, NodeJS for server-side scripting, and an understanding of containerization with Docker and Kubernetes. The culmination of these skills is demonstrated in a capstone project, bringing React and NodeJS together to produce a real-world web application.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|---|
| Prompt Engineering |
| HTML5 Essentials |
| CSS Essentials Principles of UX/UI Design |
| JavaScript |
| Typescript |
| Bootstrap |
| Getting Started with Git and GitHub |
| React |
| Code style, patterns and best practices |
| Introduction to Backend: NodeJS + Express |
| Containerization basics using Docker |
| Functional Documentation & Unit Testing |
| Capstone Project |

SOFTWARE DEVELOPMENT TRACK

3. Angular Frontend Web Developer

This frontend profile is adept in HTML5 Essentials, CSS with a focus on the principles of UX/UI design, JavaScript for dynamic interactions, Bootstrap for responsive design, and Angular for robust single-page applications. With these skills, participants will be capable of crafting user-centric websites and applications that are both functional and visually appealing.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|---|
| Prompt Engineering |
| HTML5 Essentials |
| CSS Essentials Principles of UX/UI Design |
| JavaScript |
| Typescript |
| Bootstrap |
| Getting Started with Git and GitHub |
| Angular |
| Code style, patterns and best practices |
| Introduction to Backend: NodeJS + Express |
| Containerization basics using Docker |
| Functional Documentation & Unit Testing |
| Capstone Project |

SOFTWARE DEVELOPMENT TRACK

4. Mobile App Developer

A Mobile Application Developer is responsible for designing, developing, and maintaining a native mobile application, with an introduction to cross platform mobile application development. The courses in this profile cover a range of technologies that a Mobile Application Developer should have a strong understanding of and be able to use these technologies to design and develop responsive and user-friendly mobile applications.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|---|
| Prompt Engineering |
| Java Programming Fundamental & OOP |
| UI/UX Basics |
| Android Application Development Using Kotlin |
| Getting Started with Git and GitHub |
| Functional Documentation & Unit Testing |
| Android Security Essentials |
| Dart programming language (cross platform) |
| Flutter Applications Development (cross platform) |
| Capstone Project |

SOFTWARE DEVELOPMENT TRACK

5. Full Stack .Net Web Developer

Rooted in .NET technologies, this profile reflects a solid foundation for data-driven applications. With a strong grasp of C#, the candidate is equipped with robust back-end development. Front-end proficiency is ensured through HTML5, JavaScript, and CSS3, creating a full-stack capability. Experience with the .NET Core Web API and MVC frameworks enables the creation of scalable, modern web services and applications, completing a versatile skill set for comprehensive .NET development.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|---|
| Prompt Engineering |
| Introduction to SQL Server Programming |
| Getting Started with Git and GitHub |
| Programming in C# |
| Programming in HTML5, JavaScript & CSS3 |
| Functional Documentation & Unit Testing |
| Containerization basics using Docker |
| .Net Core Web API |
| Developing .NET Core MVC Web Applications |
| Capstone Project |

SOFTWARE DEVELOPMENT TRACK

6. AWS Cloud Specialist

An AWS Cloud Developer is responsible for setting up, maintaining, and evolving the cloud infrastructure of web applications. They are expected to understand all the core AWS services and have experience with creating, debugging, and managing AWS infrastructure. They are also expected to understand the current infrastructure stack, scalability, and reliability goals.

The technical study plan proposed for an AWS Developer Associate is provided below:

| Course Contents |
|---|
| Prompt Engineering |
| AWS Cloud Foundations |
| AWS Cloud Services |
| AWS Cloud Security Foundations |
| AWS Academy Cloud Web Application Builder |
| Capstone Project |

SOFTWARE DEVELOPMENT TRACK

7. Software Tester

Software testing is a crucial part of the software development lifecycle, and a Software Tester is responsible for ensuring that software products meet quality standards. A successful Software Tester should have a strong understanding of the topics covered in the courses in this profile and be able to use them to design and execute effective testing strategies.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|--|
| Prompt Engineering |
| Java programming fundamentals |
| Fundamentals Of Testing |
| Testing Throughout the Software Development Life Cycle |
| Static Testing Techniques |
| Test Tools (selenium, postman) |
| Test Analysis & Design |
| Managing Test Activities |

DIGITAL MARKETING & ARTS TRACK

Ever dreamed of turning your artistic passion into a thriving career? The Digital Marketing & Arts track is your launchpad! Here, you'll gain the skills to be a **double threat**: a talented artist who can **masterfully market your creations** and those of others.

This dynamic program equips you with the tools to:

- **Craft captivating artwork** using industry-standard software like Autodesk 3D, graphic branding design, and motion graphics for engaging videos.
- **Become a UI/UX expert** who designs user-friendly interfaces for websites and apps.
- **Harness the power of digital marketing**: Learn to promote your art, manage social media campaigns, and build a strong online presence.

This track goes beyond technical skills. We'll help you **develop your artistic vision** and **hone your marketing savvy**, making you a **highly sought-after professional** in the ever-changing digital landscape.

Ready to unleash your creativity and build a successful career? Join the Digital Marketing and Arts track!

Digital Marketing & Arts

1. Digital Marketing Specialist
2. UI & UX Web Designer
3. Motion Graphics Designer
4. Graphics Designer
5. Mastering Professional 3D designs

DIGITAL MARKETING & ARTS TRACK

1. Digital Marketing Specialist

Become a Digital Marketing Mastermind in this job-ready course! Learn advanced marketing tactics to craft powerful messages and build winning strategies. We'll cover everything from marketing basics to creating a content strategy. Master social media like Facebook, Instagram, and more! You'll also conquer email marketing, mobile marketing, Google Ads, and customer relationship management. You'll level up your skills with real-world projects, building a portfolio that showcases your abilities. By the end, you'll be a confident digital marketing specialist.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|---|
| Prompt Engineering |
| Foundations of Marketing |
| Foundations of Digital Marketing |
| Content Strategy Development |
| Social Media Marketing (Facebook, Instagram, X, LinkedIn, TikTok, Snapchat) |
| Email Marketing |
| Google Ads |
| Mobile Marketing |
| Customer Relation Management for Digital Marketing |
| Performance Measurement & Reporting |
| Affiliate Marketing |
| Planning & Allocating Budget |
| Capstone Project |

DIGITAL MARKETING & ARTS TRACK

2. UI & UX Web Designer

Design Apps and Websites People Love! This course gets you started in UI/UX design, a cool field where you make apps and websites easy and fun to use. We'll teach you advanced tricks like talking to real users to understand their needs, organizing information clearly, and making buttons and menus work smoothly. You'll learn to work with other designers and programmers to turn ideas into awesome apps and websites!

This course isn't just lectures – you'll get to practice by working on real projects. Imagine building a portfolio that shows you can design apps that are easy to navigate, clear and attractive websites, and anything else users might need! By the end, you'll have the skills and confidence to land a job in a growing field, working on websites, apps, and more for tech companies, online stores, and all sorts of businesses. Get ready to design the future!

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|---|
| Prompt Engineering |
| Basic Concepts of user experience (UX) design |
| Basic Concepts of user interface (UI) design |
| Adobe XD |
| Figma |
| Adobe Illustrator (for Web) |
| Adobe Photoshop (for Web) |
| Capstone Project |

DIGITAL MARKETING & ARTS TRACK

3. Motion Graphics Designer

This course won't just teach you software – it'll unleash your inner motion master! Through hands-on projects, you'll build a killer portfolio that shows you can create show-stopping motion graphics. Imagine crafting title sequences that grab attention like a movie trailer or explainer videos that make complex ideas crystal clear. We'll dive into the secrets of storytelling through animation, using sound and visuals to make viewers feel something real. By the end, you'll have a portfolio packed with projects that prove you can take any idea and turn it into a captivating motion graphic that stops people in their tracks. Get ready to graduate with the skills and confidence to take the motion graphics world by storm!

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|---------------------------------|
| Prompt Engineering |
| Adobe Illustrator (for Motion) |
| Adobe After effect + Element 3D |
| Adobe Premiere Pro Fundamentals |
| Adobe Audition |
| Adobe Character Animator |
| Capstone Project |

Prerequisite:

Portfolio or Behance link for Photoshop & Illustrator Fundamentals

DIGITAL MARKETING & ARTS TRACK

4. Graphics Designer

Elevate your Visual Communication Skills! This comprehensive course equips you with the mastery of Adobe Creative Suite, the industry standard for graphic design. Through in-depth exploration of Photoshop CC, Illustrator, and InDesign, you'll gain expertise in image manipulation, photorealism, vector graphics creation, and professional layout design. But this journey goes beyond software proficiency. We'll delve into advanced techniques like typography manipulation, vector illustration methods, and 3D integration using Adobe Dimension. This project-based curriculum empowers you to build a strong portfolio, demonstrating your ability to tackle diverse design challenges and translate concepts into captivating visuals. Prepare to become a leader in crafting impactful graphic narratives that resonate with audiences.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|--------------------|
| Prompt Engineering |
| Design Principles |
| Adobe Photoshop cc |
| Adobe Illustrator |
| Adobe InDesign |
| Adobe Dimension |
| Capstone Project |

DIGITAL MARKETING & ARTS TRACK

5. Mastering Professional 3D Designs

Welcome to the world of professional 3D creation! This course is designed to transform you into a highly skilled 3ds Max artist. You'll move beyond basic modeling to master advanced techniques for crafting intricate products, environments, and characters. We'll delve into photorealistic material creation, lighting setups that capture the perfect mood, and cutting-edge rendering methods for producing stunning visuals. Throughout this project-based course, you'll gain hands-on experience by tackling real-world scenarios and building a strong portfolio that showcases your expertise. Get ready to push your creative boundaries and become a sought-after 3D artist in marketing, advertising, and beyond.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|--------------------|
| Prompt Engineering |
| Autodesk 3D Max |
| Capstone Project |

Prerequisite:

- Portfolio or Behance link for Photoshop & Illustrator Fundamentals

AI & DATA SCIENCE TRACK

This track primarily focuses on applying data science and machine learning techniques to solve real-world challenges and problems and get familiar with a wide range of topics related to this field, for example: machine learning, deep learning, language processing, and others.

By the completion of the course, you will have

- The practical experience needed to use artificial intelligence to solve problems.
- The ability to deal with data in its various forms, collect it, extract data in appropriate forms that fit processing requirements.
- The ability to understand and analyze data, and extract important information from it, and thus provide recommendations to companies in various fields.
- Effectively implement and manage large-scale and complex AI projects.
- The ability to evaluate and analyze problems as well as propose solutions related to the development of artificial intelligence systems.

AI & DATA SCIENCE

1. AWS Machine Learning Engineering
2. Microsoft Machine Learning Engineer
3. Generative AI Professional
4. Data Scientist

AI & DATA SCIENCE TRACK

1. AWS Machine Learning Engineer

AWS Machine learning engineers use AWS technology to work with algorithms, data, and artificial intelligence. Their tasks involve researching, building, and designing the artificial intelligence responsible for machine learning and maintaining and improving existing artificial intelligence systems. Often, a machine learning engineer will also serve as a critical communicator between other members of the data science team, working directly with the data scientists who develop the models for building AI systems and the people who construct and run them.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|--|
| Prompt Engineering |
| AWS Academy Cloud Foundations |
| AWS Academy Data Engineering |
| AWS Academy Machine Learning Foundations |
| AWS Academy Machine Learning for Natural Language Processing |
| MLOps Tools, MLflow, and Hugging Face |
| Capstone Project |

AI & DATA SCIENCE TRACK

2. Microsoft Machine Learning Engineer

Trainees will learn how to use Microsoft technology to translate the raw data gathered from various data pipelines into data science models that can be applied and scaled as needed. In addition, they will also develop algorithms and build programs that enable machines, computers, and robots to process incoming data and identify patterns.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|---|
| Prompt Engineering |
| Statistics and Linear Algebra Basics |
| Data Science with Python |
| Introduction to Machine Learning |
| Azure AI Fundamentals |
| Azure AI Engineer Associate |
| Natural Language Processing with Attention Models |
| Build Basic Generative Adversarial Networks GANs |
| MLOps Tools, MLflow, and Hugging Face |
| Capstone Project |

In order to practice on Microsoft Azure, Applicant must sign-up with a verified ".edu" account, or with a valid Credit (not debit) card from a bank account with at least 10\$ or equivalent in Egyptian currency. Applicants must make sure that the bank allows payment with foreign currency for credit cards. Azure subscription provides enough credit to practice profile labs.

"Please note that applicants will not pay any money for Microsoft Azure subscription with correct credit limit usage, you only need to sign up and enter a valid credit card".

AI & DATA SCIENCE TRACK

3. Generative AI Professional

Trainees will learn the required skills to use generative AI in their professional lives. Additionally, they will explore the fundamental ideas behind generative AI and gain knowledge about generative AI models. Furthermore, trainees will be introduced to the moral implications of employing generative AI.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|---|
| Prompt Engineering |
| Introduction to AI and Generative AI models |
| Machine Learning and Deep learning |
| Natural Language Processing with Attention Models |
| Build Basic Generative Adversarial Networks GANs |
| Generative AI models |
| MLOps Tools, MLflow, and Hugging Face |
| Generative AI Capstone Project |

Prerequisite:

Previous proven studies, training or work experience in machine learning.

AI & DATA SCIENCE TRACK

4. Data Scientist

This course is designed by IBM. A data scientist can leverage a unique set of skills and tools to help businesses derive value from their data. A data scientist is capable of mining the data for drivers of past and future performance, opportunities for new revenue, methods to increase efficiency, ways to improve the customer experience, and a host of other critical business insights.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|--|
| Prompt Engineering |
| What is Data Science? |
| Tools for Data Science |
| Data Science Methodology |
| Python for Data Science, AI & Development |
| Python Project for Data Science |
| Databases and SQL for Data Science with Python |
| Data Analysis with Python |
| Data Visualization with Python |
| Machine Learning with Python |
| MLOps Tools, MLflow and Hugging Face |
| Capstone Project |

DATA ANALYTICS TRACK

Data analysis aims at getting useful insights using the given data to support the process of decision making. The field of data analysis has witnessed great importance in recent years due to the boom in technology and the availability of advanced tools and techniques that help provide better results and solutions to various organizations.

The educational objectives of the program are:

- Learning different ways of analyzing data.
- Applying statistical models and modern data science tools to understand and analyze data and solve business problems.
- Studying machine learning algorithms to make the right decisions and meet the challenges of modern business.
- Acquiring different skills, tools, and methodologies to explore past business performance and drive future planning.

Data Analytics

1. Google Data Analyst Specialist
2. Microsoft Power Bi Engineer

DATA ANALYTICS TRACK

1. Google Data Analyst Specialist

A data analyst specialist is responsible for analyzing data and extracting useful insights from large amounts of data using a variety of tools and techniques. A data analyst's roles and responsibilities are a combination of technical and management roles. Google Data analysts visualize data and prepare reports on data findings, review data quality to identify possible sources of error, consult with management on potential changes to business processes, recommend further changes to data models or data structures, identify patterns and trends in data using data mining and statistical analysis software, and recommend improvements in the products and services to achieve customer satisfaction and preferences.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|--|
| Prompt Engineering |
| Foundations of Data and Data Analytics |
| Make Data-Driven Decisions |
| Data Preparation for Exploration using Python |
| Data Cleaning Process and Organization of data using SQL |
| Data Analysis to Answer Questions |
| Data Visualization using Tableau |
| Introduction to Microsoft Power BI |
| Data Governance |
| Capstone: Complete a Case Study |

DATA ANALYTICS TRACK

2. Microsoft Power BI Engineer

Power BI Engineer is responsible for collecting, analyzing, and visualizing data from various sources using Azure services. They analyze massive amounts of data to find trends, patterns, and insights that can make informed business decisions. A Microsoft Enterprise Data Analyst's roles and responsibilities are a combination of technical and management roles. Microsoft Enterprise Data Analysts collect and analyze data to identify trends and patterns, build predictive models using machine learning algorithms, create dashboards and reports to visualize data, identify and correct data quality issues, collaborate with business stakeholders to understand their data needs, and update data analytics tools and technologies.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|---|
| Prompt Engineering |
| Introduction to Data Analysis & Data Driven Decisions |
| Introduction to PowerBI |
| Extract Data from Different Sources in PowerBI |
| Data Cleaning using PowerQuery |
| Introduction to DAX |
| Data Analysis and Visualization using PowerBI |
| Dashboard and Report Development in PowerBI |
| Data Modeling and Integration in PowerBI |
| Publishing and Sharing PowerBI Report |
| Data Refresh Mechanisms in PowerBI |
| Tableau Desktop Fundamentals |
| Tableau Desktop Intermediate |
| Data Governance |
| Capstone: Complete a Case Study |

INFRASTRUCTURE & SECURITY TRACK

With the increase in the use of the Internet in the tasks of our daily lives (such as electronic banking services, online shopping, social media, etc.), personal data has become increasingly vulnerable to electronic attacks, as attackers use modern methods and technologies to overcome traditional security controls. This is why cyber security has become an important field and is in high demand.

The cyber security track includes the techniques and mechanisms for ensuring the security of computer systems, data, and networks and protecting them from various electronic attacks.

The educational objectives of the program are:

1. Developing the manpower required to protect Egypt from electronic threats, while ensuring that security priorities are aligned with the country's work needs and strategies
2. Empowering graduates with the technical knowledge and skills necessary to protect and defend computer systems and networks
3. Develop graduates who are able to identify, analyze, and remedy computer security breaches
4. Develop graduates who can plan, implement and monitor cyber security mechanisms to help ensure that IT assets are protected.

INFRASTRUCTURE & SECURITY

1. Cisco Network Administrator
2. Fortinet Cybersecurity Engineer
3. Cisco Cybersecurity Engineer
4. Azure Cloud Solution Admin & Architect
5. Cyber Security Incident Response Analyst
6. Vulnerability Analyst / Penetration Tester

INFRASTRUCTURE & SECURITY TRACK

1. Cisco Network Administrator

A Cisco Network Administrator is capable of the following using Cisco technologies; designing, installing, configuring, and maintaining Cisco network devices, such as routers, switches, firewalls, access points, etc., Troubleshooting and resolving network issues, such as connectivity, performance, security, etc., Monitoring and optimizing network performance and availability using various tools and methods, Implementing and enforcing network security policies and standards, such as encryption, authentication, authorization, etc., Updating and upgrading network software and hardware in accordance with best practices and company procedures, Documenting and reporting network configuration, status, and changes, Providing technical support and guidance to network users and other IT staff, Collaborating with other network engineers, administrators, vendors, and stakeholders on network projects and initiatives.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|---|
| Prompt Engineering |
| Cisco CCNA Routing and Switching (200-301 CCNA) |
| Cisco CCNP Enterprise (350-401 ENCOR) |

INFRASTRUCTURE & SECURITY TRACK

2. Fortinet Cybersecurity Engineer

Fortinet Cybersecurity Engineer is capable of the following using Fortinet technologies; planning, implementing, managing, monitoring, and upgrading security measures for the protection of the organization's data, systems, and networks. Troubleshooting security and network problems and responding to all system and/or network security breaches, Configuring and implementing intrusion detection systems and firewalls, Maintaining firewalls, virtual private networks, web protocols, and email security, Creating virus and threat detection systems and performing vulnerability and risk assessments, Testing and checking the system for weaknesses in software and hardware, Developing and implementing security policies and standards, such as encryption, authentication, authorization, etc., Updating and upgrading security software and hardware in accordance with best practices and company procedures, Documenting and reporting security configuration, status, and incidents, Providing technical support and guidance to security users and other IT staff, Collaborating with other security engineers, administrators, vendors, and stakeholders on security projects and initiatives.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|--|
| Prompt Engineering |
| Cisco CCNA Routing and Switching (200-301 CCNA) |
| FCP Network Security - FortiGate Administration 7.4 |
| FCP Network Security – FortiManager Administration 7.4 |

INFRASTRUCTURE & SECURITY TRACK

3. Cisco Cybersecurity Engineer

A Cisco Cybersecurity Engineer should be capable of the following using Cisco technologies; Planning, implementing, managing, monitoring, and upgrading security measures, in accordance with best practices and company procedures, for the protection of the organization's data, systems, and networks, such as encryption, authentication, authorization, etc., Troubleshooting security and network problems and responding to all system and/or network security breaches, Configuring and implementing intrusion detection systems and firewalls, documenting and reporting security configuration, status, and incidents, Maintaining firewalls, virtual private networks, web protocols, and email security and Creating virus and threat detection systems, performing vulnerability and risk assessments, and testing and checking the system for weaknesses in software and hardware.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|---|
| Prompt Engineering |
| Cisco CCNA Routing and Switching (200-301 CCNA) |
| Cisco CyberOps Associate (200-201 CBROPS) |

INFRASTRUCTURE & SECURITY TRACK

4. Azure Cloud Solution Admin & Architect

Azure Cloud Solution Admin & Architect is capable of; creating a well-informed cloud strategy and managing the adaptation process, evaluating cloud applications, developing and organizing cloud systems and working closely with IT security to monitor the company's cloud privacy, etc., Implementing and enforcing cloud security policies and standards, updating and upgrading cloud software and hardware, documenting and reporting cloud configurations, status, and changes, providing technical support and guidance to cloud users, collaborating with other cloud engineers, administrators, vendors, and stakeholders.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|--|
| Prompt Engineering |
| Introduction to Active Directory |
| Azure Fundamentals (AZ-900) |
| Azure Data Fundamentals (DP-900) |
| Azure Administrator Associate (AZ-104) |
| Azure Solution Architect Expert (AZ-305) |
| Azure Security Technologies (AZ-500) |
| Designing And Implementing Microsoft Azure Networking Solutions (AZ-700) |

Prerequisite:

- Network basics



In order to practice on Microsoft Azure, Applicant must sign-up with a verified ".edu" account, or a valid Credit (not debit) card from a bank account with at least 10\$ or equivalent in Egyptian currency.

Applicant must make sure that the bank allows payment with foreign currency for credit cards. Azure subscription provides enough credit to practice profile labs.

"Please note that applicant will not pay any money for Microsoft Azure subscription with correct credit limit usage, you only need to sign up and enter a valid credit card".

INFRASTRUCTURE & SECURITY TRACK

5. Cyber Security Incident Response Analyst

A Cyber Security Incident Response Analyst is capable of the following; responding to incidents and threats tracked by the Incident Response Management System. Incidents may include phishing, network, email, IDS, or antivirus alerts, Performing log, vulnerability, or compliance analysis/remediation, Collection, collating, and secure handling of evidence for storage and/or processing, Drafting reports and security briefs as needed, and Participation in intra-departmental meetings and projects in support of Network, Infrastructure, and Support groups as assign.

| Course Contents |
|---|
| Prompt Engineering |
| Intro to Threats, Vulnerabilities, and Incident |
| Assessing Threats |
| Finding Security Vulnerabilities |
| Fixing Security Vulnerabilities |
| Preparing for Inevitable Attacks |
| Project: Navigating a Cybersecurity Incident |

Prerequisite:

- Network basics

INFRASTRUCTURE & SECURITY TRACK

6. Vulnerability Analyst / Penetration Tester

A Vulnerability Analyst / Penetration Tester is capable of the following; Ensuring that all Network security tests are conducted within the framework set by Mastercard, Ensure that all test cases and tools are used appropriately for testing various network segment types, Ensuring that all help and guidance is provided to development teams on the vulnerabilities identified in their applications while performing security testing, Identify improvement areas in the security testing domain and implement learnings for the Globally located team, Coordinate with application development teams on their demands for security testing and provide a seamless experience with testing and reporting of penetration tests, and Working with a global team spread across time-zones and geographies.

| Course Contents |
|--|
| Prompt Engineering |
| Intro to Penetration Testing & Red Team Operations |
| Reconnaissance |
| Scanning & Research |
| Gaining Access |
| Maintaining Access |
| Covering Tracks & Reporting |

Prerequisite:

- Network basics

Management & ERP TRACK

The field of Enterprise Resource planning is concerned with the study of various techniques for organizing and managing the personnel and resources of companies with high efficiency, improving operations, achieving automation, and making decisions based on data and various scientific and technological methods that have boomed in recent years.

The importance of studying this specialization lies in increasing the income of individuals and companies through various job possibilities opening up in the business and technology sectors, as institutions increasingly apply ERP systems locally and globally. Also, the experiences gained from the study contribute to the success of the institutions, and this success is represented by increasing their competitiveness with international companies.

The educational objectives of the program are:

- The study provides a comprehensive understanding of administrative processes and scientific methods for improving them, and enhances problem-solving skills using various algorithms.
- The study equips individuals with the necessary skills to adapt to digital transformation and collaborate and communicate effectively within multidisciplinary teams.
- Enabling organizations to manage their daily tasks and internal and external resources with high efficiency.
- Learn about and use the different technologies used globally, such as MS Dynamics 365, and Odoo.

Management & ERP

1. Odoo Application Consultant
2. Oracle Digital Accounting Specialist
3. Oracle Digital Supply Chain Specialist
4. Oracle Digital Human Resources specialist

Management & ERP TRACK

1. Odoo Application Consultant

The target job for an Odoo Application Consultant involves designing, implementing, and deploying software for applications in the Odoo ERP suite. They specialize in developing strategies to optimize a company's management processes using Odoo tools and modules to ensure efficiency and smooth workflow. The primary qualifications to become an Odoo consultant include a bachelor's degree in computer science or a relevant field and experience working with the Odoo ERP suite. An Odoo consultant may collect and analyze business requirements, write business requirement documents, and other functional and technical documents.

The technical study plan proposed for this job profile is provided below:

| Course Contents |
|--|
| Prompt Engineering |
| ERP Business Introduction and ERP Accounting Concepts |
| Practicing General Ledger |
| Practicing Accounts Payable and Payment |
| Practicing Receivables and Collections |
| Practicing Cash Management |
| Practicing Fixed Assets |
| ERP Introduction and Consulting Role |
| Outlining Odoo ERP Components |
| Odoo Implementation Life Cycle Concepts |
| Accounting Implementation Management |
| Inventory Implementation Management |
| Purchasing Cycle Implementation Management |
| Human Resources Cycle Implementation Management |
| Life Cycle Review Project (Tips & Tricks) |
| Workshop & Project: complete Financials Implementation Cycle |

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2. Oracle Digital Accounting Specialist

Oracle digital accounting Specialist is responsible for day-to-day work covering all accounting modules (GL, accounts receivable, accounts payable, banking, and fixed assets), and this will provide clients with digital accounting specialists covering all accounting areas.

| Course Contents |
|---|
| Prompt Engineering |
| ERP Business Introduction and ERP Accounting Concepts |
| Practicing General Ledger |
| Practicing Accounts Payable and Payment |
| Practicing Inventory transactions and reports |
| Practicing Receivables and Collections |
| Practicing Cash Management |
| Practicing Fixed Assets |
| Applied Workshop |

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3. Oracle Digital Supply Chain Specialist

Oracle digital SCM Specialist is responsible for day-to-day work covering all purchasing and warehouse activities, and this will provide clients with a digital SCM specialist covering all material management areas.

| Course Contents |
|--|
| Prompt Engineering |
| ERP Business Introduction and SCM Concepts |
| Practicing Inventory Management |
| Practicing Procurement Management |
| Practicing Order Management |
| Applied Workshop |

Management & ERP TRACK

4. Oracle Digital Human Resources Specialist

Oracle digital HCM Specialist is responsible for day-to-day work covering all personal, timesheet and payroll contents, and this will provide clients with a digital HCM specialist covering all Human resources areas.

| Course Contents |
|---|
| Prompt Engineering |
| ERP Business Introduction and HR Concepts |
| Practicing Global Human Capital Management |
| Practicing Payroll |
| Practicing Vacations and Absence Management |
| Applied Workshop |