NIT

NATIONAL INFORMATION TECHNOLOGY ACADEMY
الأكاديمية الوطنية لتقنية المعلومات

TRAINING PROGRAM CATALOGUE

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1 INTRODUCTION

1.1 ABOUT NATIONAL IT ACADEMY

The National Information Technology Academy (NITA) is a non-profit training institution established by the four Founding Stakeholders: Saudi Aramco, the Ministry of Communications and Information Technology (MCIT), the Technical & Vocational Training Corporation (TVTC) and Communications and Information Technology Commission (CITC). The Academy will provide Saudis with advanced and accelerated training programs to develop a "job-ready" talent pool. This is in line with the Kingdom's 2030 Vision to support the digital transformation and lower the rate of unemployment.

1.2 VISION

To be the leading training academy for the Information and Communications Technology disciplines.

1.3 MISSION

To bridge the skills gap between academia and the industry by supplying highly motivated, skilled and job-ready Saudi workforce.

1.4 CHAIRMAN MESSAGE

The National IT (NIT) Academy's strategic objectives are aligned with those of the Kingdom's Vision 2030: developing the IT sector and a digital economy, increasing local workforce skills, equipping citizens with competencies that will meet the future needs of the labor market, and increasing Saudi's participation in the workforce. As such, the Academy is investing in Saudi human capital by training and equipping Saudis with market relevant ICT skills, bridging the skills gap, and developing a "job-ready" talent pool to utilize and benefit from. The Academy's curriculum focuses on technical and professional skills, as well as addressing emerging technologies that are aligned with market needs where students are 'trained to hire' As the Chairman of the NIT Academy, it is my pleasure to welcome everyone to our organization and encourage you to experience the best of what the academy has to offer.

 Mr. Yousef Al Ulyan.

1.5 WHAT DOES NATIONAL IT ACADEMY PROVIDE?

■   Customized and specialized Information and Communications Technology (ICT) technical and certification training programs focused on emerging technologies with various disciplines.

■   Seek trainee's sponsorship companies who will hire them upon their graduation from NIT Academy.

■   Grant accredited graduation certificates at the highest levels for graduates from its training programs.

■ Foster workplace safety, emphasize a strong work ethic, promote model corporate values, interpersonal and professional skills.

2 LEARNING STREAMS :

2.1 BRIDGE STREAM

- ~ 6 Months Program.
- Specified to the University Graduates, for training ending with employment.
- Trainees of this program will receive training courses in soft skills as well as advanced training and renowned certifications.

2.2 CORE STREAM

- ~ 18 Months Program.
- Foundation program specified to High School Graduates, for training ending with employment.
- Trainees of this program will receive training courses in English and soft skills followed by technical training in disciplines that are in high demand in the job market.

2.4 UP-SKILLING STREAM

- Short Courses.
- Provided per companies' demand.
- Provided to On-job employees who work in the ICT field to upskill their knowledge.

2.3 DISTANCE LEARNING STREAM

- 3 Months Program.
- Provided by Coursera, which is one of the leading online education platforms in the worldwide.
- Designed to ensure that training is available to the public regardless of their geographic location.
- Focuses on Technical Skills.

3 LEARNING PROGRAMS :

3.1 IT QUALITY ASSURANCE

3.1.1 COURSE DESCRIPTION

- Course duration is ~ 5 weeks.
- This course focuses on computer science and product testing fundamentals.
- It covers the methods used to ensure quality such as ensuring conformance to one or more standards such as ISO 9000 or a model such as CMMI.
- This course covers quality assurance that spans the entire software development process including requirements definition, software design, coding, source code control, code reviews, software configuration management.

3.1.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Develop quality check guidelines. -Oversee software development process. -Build testing plan, write test cases and bug reports. -Use quality assurance tools and techniques.
- Track quality assurance metrics -Optimize quality assurance process.

3.2 IT SECURITY FUNDAMENTALS

3.2.1 COURSE DESCRIPTION

- Course duration is ~ 4 weeks.

- This course focuses on the methodologies and practices of the basic security concepts utilized by cyber security professionals.

- This course utilizes tools and techniques to educate students on the fundamentals of cyber security and associated practices for securing networks and penetration testing of operating systems.

3.2.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Monitor security systems to identify, detect vulnerabilities and attempted attacks.

- Analyze data and interpret the results to identify vulnerabilities, threats, and risks to an organization.

- Maintain security operations.

- Respond to security queries.

- Facilities security compliance.

- Optimize security system performance.

- Be specialize to analyze the security of networks.

- Develop the skills to conduct penetration tests simulating a real

- world security environment.

3.3 IT BUSINESS ANALYSIS

3.3.1 COURSE DESCRIPTION

- Course duration is ~ 4 weeks.
- This course focuses on applying analytical processes of planning, designing and implementation of the IT systems to meet the business requirements of customer organizations.
- This practical course will provide students with fundamental analysis tools and techniques, including methods to understand the business environment, define a problem using a systematic approach, develop and design systems solutions.

3.3.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Assess and analyze the business environment and define the scope of business. problems using different tools and techniques.
- Capture project requirements, design high-value solution approaches, and ensure that the defined scope meets the customer's needs, goals, objectives, and expectations.
- Use development tools to generate reports, dashboards, and analytical solutions according to business rules and specifications.
- Assist in establishing new IT systems or improve existing IT systems.
- Facilities change management..
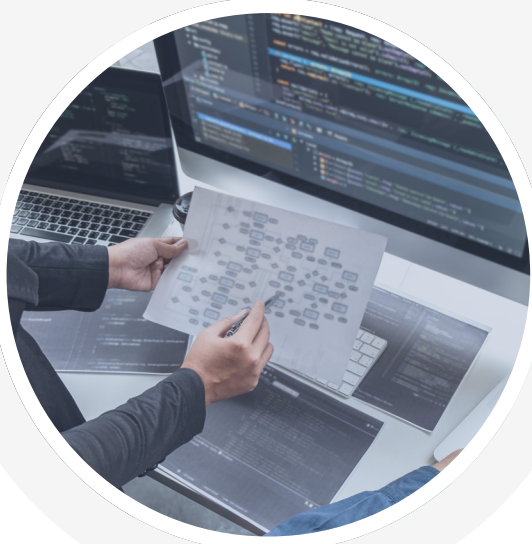
3.4 DATABASE MANAGEMENT

3.4.1 COURSE DESCRIPTION

■ Course duration is ~ 5 weeks.

■ This course focuses on planning, development, implementation, designing and administration of IT systems for the acquisition, storage, and retrieval of data.

■ This course also enables students to be familiar with database analysis.

3.4.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

■ Analyze and define data requirements and specifications to design, normalize, develop, install, and implement databases and data warehouses.

■ Install, configure, and maintain database management systems software.

■ Develop and administer data standards, policies and procedures.

■ Evaluate and provide recommendations on the new database technologies and architectures.

■ Conduct data modeling techniques and methodology development.

■ Provide applications support, performance monitoring, maintaining database backup and recovery environment.

■ Perform capacity planning and reporting, configures and manages cloud data services for data management and analytics.

■ Create, test, and maintain conceptual, logical and physical models for business intelligence -Manage and maintain data model repository.

3.5 USER INTERFACE EXPERIENCE DESIGN

3.5.1 COURSE DESCRIPTION

- Course duration is ~ 4 weeks.
- This course provides the knowledge in the design, development, documentation, debugging and support of the user interface (UI) to have the best possible user experience.
- This course also enables students to design and develop engaging user experiences (UX) for a variety of applications and evaluate how users feel about the interface.

3.5.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Articulate, develop and model the end user experience including the visual design of the application, to make user interaction simple, efficient, and consistent.
- Assess and optimize the performance of new and existing features by actively participating in usability testing and user research, and interpreting analytics data.
- Evaluate of user feedback and offers new and fresh perspectives and suggestions to optimize the user experience.
- Translate the user needs and business requirements into features and functionalities that enhance application experiences.

3.6 IT TECHNICAL SUPPORT

3.6.1 COURSE DESCRIPTION

- Course duration is ~ 4 weeks.

- This practical course will provide students with the skills of how to be able to link customer expectations with the customer service values of the organization by asking questions effectively.

- This course also enables students to design and implement functional networks, configure, manage, and maintain essential network devices by using switches and routers to segment network traffic and create resilient networks.

- This course provides the knowledge of key concepts and values of IT service management that can help organizations to adopt and adapt service management.

3.6.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Identify the benefits and drawbacks of existing network configurations and be able to support the creation of virtualized networks.

- Implement network security, standards, and protocols.

- Address the troubleshooting of network problems.

- Understand customers' needs. -Provide best practice framework to boost the efficiency, effectiveness, and overall quality of IT-related services related to the governance of IT management framework.

3.7 NETWORK MANAGEMENT

3.7.1 COURSE DESCRIPTION

- Course duration is ~ 4 weeks.

- This course focuses on Installation, Storage, and Compute of Windows Servers networking.

- This course identifies the infrastructure services and security management, network fundamentals, LAN switching technologies, routing technologies, WAN technologies.

3.7.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Design and implement functional networks.

- Implement network security, standards, and protocols.

- Practice the concepts and values of IT service management, activities of the service value chain, and how they interconnect.

3.8 DIGITAL TRANSFORMATION

3.8.1 COURSE DESCRIPTION

- Course duration is ~ 4 weeks.
- This course provides the knowledge of digital transformation in the software industry as well as the impact in the corporate market and opportunities.
- This course also presents success cases and a recipe for success through the organization's transformation.

3.8.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Get a close view of new technologies which will influence strategic business decision making now and in the future.
- Process and analyze the IT operational standards in order to provide a service-oriented approach.

3.9 CUSTOMER SERVICE

3.9.1 COURSE DESCRIPTION

- Course Duration is ~ 4 weeks.
- This course focuses on the customer access strategies and levels of customer service values.
- This course also provides the knowledge of effective real-time management, planning and management process.
- This course enables the student to meet the best levels of providing services consistently and measurably.

3.9.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Understand customer service profession and to improve the quality of services and productivity.
- Attain customers' satisfaction through measure the quality of provided services.- Communicate effectively with customers.

3.10 E-COMMERCE MARKETING SPECIALIST

3.10.1 COURSE DESCRIPTION

- Course Duration is ~ 4 weeks.
- This course focuses on the internet marketing strategies for businesses and integrated web communications.
- This course also provides the knowledge of website design development and creating dynamic web presence.
- This course enables the student to understand social media business landscape and to understand the email marketing platform and automation of emails.

3.10.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Learn the Architecture of a Successful Ecommerce and the eCommerce engine. -Learn about ecommerce widgets, plugin, tools and services.
- Learn about content creation & content distribution platforms.
- Learn about SEO and SEO toolsets.
- Learn About social Media marketing & content creation.
- Maximize Sales with Ecommerce Email Automation & drip Marketing.

4 TRAINING BOOTCAMPS

4.1 CYBER SECURITY

4.1.1 COURSE DESCRIPTION

- Course duration is ~ 12 weeks.
- This course focuses on the methodologies and practices of the basic security concepts utilized by cyber security professionals.
- This course utilizes tools and techniques to educate students on the fundamentals of cyber security and associated practices for securing networks and operating systems.

4.1.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Identify the key components of Cybersecurity network architecture.-Apply Cybersecurity architecture principles.
- Identify security tools and hardening techniques.
- Analyze threats and risks within context of the Cybersecurity architecture.
- Appraise Cybersecurity incidents to apply appropriate response.
- Evaluate decision making outcomes of Cybersecurity scenarios.

4.2 DATA ANALYTICS

4.2.1 COURSE DESCRIPTION

- Course duration is ~ 12 weeks.
- This program focuses on the foundational concepts and techniques of Data Analytics.
- his course focuses on explore Data Analysis, Data Visualization, Data Mining, Regression.

4.2.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Apply principles and skills of economics, marketing, and decision making to contexts and environments in data science.
- Build and assess data-based models.
- Execute statistical analyses with professional statistical software. -Demonstrate skill in data management.
- Analyze legal and ethical principles applied to contexts and environments of data science and decision making.
- Design tested and effective advanced analytics models and simulations for decision making.

4.3 DATA SCIENCE

4.3.1 COURSE DESCRIPTION

- Course duration is ~ 12 weeks.
- This course focuses on the foundational concepts, theory, and techniques to become an effective data scientist.
- This course covers all skills related to data acquisition, data parsing and models, data storage, data validation and exploration.

4.3.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Build and use data flow channel and data processing systems that support the collection, storage, batch and real time processing and analyses of information in scalable and secure manner.
- Find quality data sources and how to work with APIs programmatically. -Collect, extract, query, clean, and aggregate data for analysis.
- Create static/dynamic visualizations for data and models using different tools and methods (e.g., UNIX, Git, SQL, Python).
- Use development tools to generate reports, dashboards, and analytical solutions according to business rules and specifications.

4.4 ARTIFICIAL INTELLIGENCE

4.4.1 COURSE DESCRIPTION

- Course duration is ~ 12 weeks.
- This course Introduce the basic principles, techniques, and applications of Artificial Intelligence.
- This course cover the AI language tools Potential areas of further exploration include expert systems, neural networks, robotics, natural language processing, and computer vision.

4.4.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Apply basic principles of AI in solutions that require problem solving, inference, perception, knowledge representation, and learning.
- Demonstrate awareness and a fundamental understanding of various applications of AI techniques in intelligent agents, expert systems, artificial neural networks, and other machine learning models.
- Demonstrate proficiency developing applications in an 'AI language', expert system shell, or data mining tool.
- Demonstrate proficiency in applying scientific method to models of machine learning.

4.5 SOFTWARE ENGINEERING

4.5.1 COURSE DESCRIPTION

- Course duration is ~ 12 weeks.
- This course focuses on planning, development, implementation, designing and administration of IT systems for the acquisition, storage, and retrieval of data, development, and testing.
- This course focuses on methodologies and best practices of software engineering, including client/server concepts and technologies to build full stack applications, through a deep understanding of fundamental computer science concepts (such as algorithms and data structures), object-oriented and functional programming.

4.5.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Analyze and define data requirements and specifications to design, normalize, develop, install, and implement databases and data warehouses.
- Install, configure, and maintain database management systems software.
- Conduct data modeling techniques and methodology development.
- Provide applications support, performance monitoring, maintaining database backup and recovery environment.
- Perform capacity planning and reporting, configures, and manages cloud data services for data management and analytics.
- Manage and maintain data model repository.

4.6 CLOUD COMPUTING

4.6.1 COURSE DESCRIPTION

- Course duration is ~ 12 weeks. =This course focuses on the foundational concepts and techniques for designing, developing, deploying, debugging, managing and operating cloud applications.
- This course covers the essential security measures to secure data on cloud and the best practices related to cloud architecture.

4.6.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Analyze existing infrastructure for cloud migration, select appropriate cloud services to design and deploy an application based on given requirements.
- Design, develop, and debug cloud-based applications.
- Monitor metrics around reliability, stability and performance of cloud infrastructure after implementation and provide cloud infrastructure support to users.
- Troubleshoot the system issues and failure.
- Code to implement essential security measures.
- Administers servers across virtual platforms and leverage open-source solutions to automate tasks.
- Work with public cloud platforms such as Amazon Web Services, Microsoft Azure, Google Compute Platform.

4.7 SERVER AND NETWORKING

4.7.1 COURSE DESCRIPTION

- Course duration is ~ 12 weeks.
- This course provides ds the trainees with the knowledge and skills necessary for server technologies, including installation, storage, and networking management.
- This course also provides the basic information required in project management, essentials of technology, network management, security, and Linux.

4.7.2 EXPECTED LEARNING OUTCOMES

At the end of this course participants will be able to:

- Design Networks as well as manage servers.
- Address the basics information of programming and network devices.
- Solve the network problems.
- Maintain the network operations.
- Prepare servers' backup.

5 NATIONAL IT ACADEMY FOUNDING STAKEHOLDERS

NIT Academy has some of the leading regional organizations as its founding stakeholders:

6 NATIONAL IT ACADEMY CORPORATE SPONSORS

NIT Academy has several leading companies from the ICT and energy sectors serving as sponsors for the students, looking over their training and employment needs:

7 CONTACT US

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