



Ministry of Communication and Information Technology
Information Technology Institute

EDUEgypt Program - Phase VIII

Academic Year 2014 - 2015

ITO Program Schedule - Benha University

Day	University	Track	Provider	Group	Time	Location
Tuesday	Benha	Open Source Network Security (Cyber Security)	PI Technologies	G 1	9:30 - 3:30	To be Updated
		Microsoft Cloud Computing (Azure)	IT Egypt Corp.	G 3		To be Updated
		Microsoft SQL Server 2012	IT Egypt Corp.	G 4		To be Updated
		Oracle Web Development	Egabi	G 2		To be Updated

15/2/2015



EDUEgypt Program Phase VIII - Academic Year 2014 - 2015

ITO Program - Course Outline

Track	Microsoft Cloud Computing & Azure	Provider	IT Egypt Corp.
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S.	Topics	Hrs.
1	Programming in C# with Microsoft Visual Studio 2010 (Customized)	60
2	Explain the purpose of the .NET Framework, and understand how to use C# and Visual Studio 2010 to build .NET Framework applications	
3	Understand the syntax of basic C# programming constructs	
4	Create and call methods in a C# application	
5	Use inheritance to create new reference types	
6	Integrate code written by using a dynamic language such as Ruby and Python, or technologies such as COM, into a C# application	
7	Windows Azure Solutions with Microsoft Visual Studio 2010	
8	Understand cloud computing in its various forms and how Windows Azure fits in the cloud computing space. Learn why organizations want to run applications in the Azure cloud	
9	Understand the architecture of Azure. Learn how to create and deploy background computational applications (Worker Role) in Azure	
10	Examine SQL Azure, the relational database in the cloud	
Total No. of Hrs.		60



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ITO Program - Course Outline

Track	Oracle Web Development	Provider	Egabi
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S.	Topics	Hrs.
1	Fundamentals of Java EE Technology	6
2	Designing Java EE Applications	6
3	Developing a Web-Application Using Servlets	6
4	Developing a Web-Application Using Java Server Pages	6
5	Developing the Persistence Layer with JPA Entities	6
6	Modeling the Database Schema	6
7	Building a Data Model with ADF Business Components	6
8	Querying and Persisting Data	6
9	Declaratively Customizing Data Services	6
10	Troubleshooting ADF BC Applications	6
Total No. of Hrs.		60

15/02/2015



EDUEgypt Program Phase VIII - Academic Year 2014 - 2015

ITO Program - Course Outline

Track	Microsoft SQL Server 2012	Provider	IT Egypt Corp.
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S.	Topics	Hrs.
1	Describe the uses of and ways to execute the Transact-SQL language.	60
	Use querying tool.	
	Write SELECT queries to retrieve data.	
2	Group and summarize data by using Transact-SQL.	
	Join data from multiple tables.	
	Write queries that retrieve and modify data by using sub queries.	
3	Modify data in tables.	
	Query text fields with full-text search.	
	Describe how to create programming objects.	
4	Use various techniques when working with complex queries	
	Introduction to SQL Server 2012 and its Toolset	
	Working with Data Types	
5	Designing and Implementing Tables	
	Ensuring Data Integrity through Constraints	
	Planning for SQL Server 2012 Indexing	
6	Implementing Table Structures in SQL Server 2012	
	Reading SQL Server 2012 Execution Plans	
	Improving Performance through Nonclustered Indexes	
7	Designing and Implementing Views	
	Designing and Implementing Stored Procedures	
	Merging Data and Passing Tables	
8	Designing and Implementing User-Defined Functions	
	Creating Highly Concurrent SQL Server 2012 Applications	
	Handling Errors in T-SQL Code	
9	Responding to Data Manipulation via Triggers	
	Implementing Managed Code in SQL Server 2012	
	Storing XML Data in SQL Server 2012	
10	Querying XML Data in SQL Server	
	Working with SQL Server 2012 Spatial Data	
	Working with Full-Text Indexes and Queries	
Total No. of Hrs.		60



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ITO Program - Course Outline

Track	Open Source Network Security (Cyber Security)	Provider	PI Technologies
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S.	Topics	Hrs.
1	Linux History	3
2	OS Basics	3
3	Basic and Advanced Commands	3
4	Shell scripting	3
5	Administration tasks	3
6	Backup and Restore	3
7	Networking configurations	3
8	SSH and DHCP server	3
9	Basics of Shell Scripts	3
10	Advanced Shell Scripts	3
11	Basics of Wireshark	3
12	Network Auditing using Wireshark	3
13	Basics of NMAP	3
14	NMAP Advanced Options	3
15	Security of Web Applications	3
16	Web Applications Scanning using Nikto	3
17	SQL Injection	3
18	Wireless Security	3
19	System scanning using Metasploit	3
20	System Exploiting using Metasploit	3
Total No. of Hrs.		60