

## LONDON CAPITAL COMPUTER COLLEGE

## Diploma in Windows Networking (200) – Windows Exchange Server

<b>Prerequisites:</b> Knowledge in Windows operating	Corequisites: A pass or higher in Certificate in
system.	Networking or equivalence.

Aim: Exchange is a popular Microsoft messaging system that includes a mail server, an e-mail program (e-mail client), and groupware applications. Designed for use in a business setting, the Exchange server is often used in conjunction with Microsoft Outlook to take advantage of Outlook's collaborative features, such as the ability to share calendars and contact lists. There are two main reasons for the course. Firstly, this course supports the large numbers of customers running Exchange in upgrading their skills. Secondly, this course fills in a skills gap that currently exists in the industry. This course provide candidates with the knowledge and skills necessary to install and configure Microsoft Exchange. It prepares candidates with skills needed to deploy and manage Exchange. This course will assist students in operating in medium to large computing environments that typically have multiple physical locations, mixed client connection protocols, and Internet messaging connectivity. On completion of the course, candidates will be able to: Describe the new Exchange Server features; Install and deploy Exchange Server in an Exchange Server organization; Configure Mailbox servers and Mailbox server components; Manage recipient objects, including migrating recipients from previous versions of Exchange Server to Exchange Server; Migrate client access services from previous versions of Exchange Server, and configure the Client Access server role in Exchange Server; Configure the secure flow of messages between the Exchange Server organization and the internet; Implement a high availability solution for Mailbox servers and other server roles in Exchange Server; Plan and implement a disaster recovery solution for Exchange Server servers; Plan and configure messaging compliance; Configure Exchange Server security; Monitor and maintain the messaging system. Fundamental knowledge of network technologies including Domain Name System (DNS) and firewall technologies is important.

Required Materials: Recommended Learning	Supplementary Materials: Lecture notes and
Resources.	tutor extra reading recommendations.

**Special Requirements:** The course requires a combination of lectures, demonstrations, discussions, and hands on labs

and hands-on labs.	,		
Intended Learning Outcomes:	Assessment Criteria:		
1. Describe how Exchange Server is a	1.1 Outline Exchange Server versions		
reliable messaging platform that reduces costs,	1.2 Describe Exchange Server organisation		
increases productivity, and improves communications.	1.3 Describe Exchange Server storage architecture		
	1.4 Describe Exchange Server services		
	1.5 Explore Exchange Server Active		
	Directory requirements		
	1.6 Define Simple Mail Transport Protocol (SMTP)		
	1.7 Identify instant communication services		
	1.8 Outline Microsoft Management console		
2. Describe how Exchange Server uses a	2.1 Explore database structure		
transaction-based storage architecture that	2.2 Outline storage groups		
includes a database file, a native content file and	2.3 Identify database files		
transaction logs.	2.4 Explore public folder storage		
	2.5 Analyse public folder security		
	2.6 Describe client access protocols		
	2.7 Describe index building		
	2.8 Define front-end/back-end servers		
3. Describe Exchange Message Routing	3.1 Define Exchange routing groups		
Architecture message transport operates	3.2 Outline routing message flow		

	3.3	Describe how queuing engine routes messages
	3.4	Describe routing groups
	3.5	Outline how messages are routed to other email systems
	3.6	Describe routing group topologies
	3.7	Describe link state protocols
	3.8	Discuss link failures
4. Describe Exchange Server and its relationship to Active Directory and how	4.1	Identify Active Directory integration advantages
Microsoft Active Directory uses the Schema to	4.2	Explore Exchange Directory objects
represent the classes, attributes and objects.	4.3	Analyse Exchange Server mail
		distribution lists
	4.4	Outline Exchange Server expansion servers
	4.5	Analyse Exchange Server address lists
	4.6	Outline DNS configuration
5. Describe Exchange Server installation	5.1	Identify hardware requirements
requirements and demonstrate how to perform an installation of Exchange Server and verify	5.2	Outline Exchange Server installation
recipients.	5.3	process Be able to upgrade from previous
recipients.	3.3	versions
6. Describe the Exchange Server features	6.1	Explore console structure
for management interface.	6.2	Explore management snap-ins
	6.3	Be able to create custom consoles
	6.4	Outline Exchange organisational
	6.5	hierarchy Explore Global settings container
	6.6	Explore system policies container
7. Demonstrate how to manage addressing	7.1	Outline recipient object types
and recipient objects such as mailboxes, address	7.2	Be able to create mailbox enabled users
policies and address lists.	7.3	Identify group issues
	7.4	Be able to search for recipients
	7.5	Be able to configure recipient policies
8. Explain how to manage public folders	8.1	Outline public folder management
and demonstrate how to configure Public Folders	8.2	Be able to create a public folder from Outlook
using administrative tools.	8.3	Explore public folder administration
	0.5	utility
	8.4	Be able to manage public folders through
	0.5	Exchange System Manager
	8.5 8.6	Analyse public folder security features Outline Active Directory public folder issues
	8.7	Describe public folder replication
9. Describe the recommended storage	9.1	Outline the need for storage groups
group and database configuration for Exchange	9.2	Explore different types of storage group
mailbox servers and multiple storage groups.		files
	9.3	Be able to create a mailbox store
	9.4	Be able to create a public folder store
	9.5	Describe how to move or delete a store
10. Demonstrate how the Administrative	10.1	Outline Administrative tool
Groups container allows the creation of multiple	10.2	Explore Administrative Group policies
administrative groups.	10.3 10.4	Identify Administrative Group containers Explore policy conflicts
	10.4	Explore policy conflicts

11. Describe Exchange routing group		Outline routing group concepts
topology options and how to configure Routing		Be able to create a routing group
Group connectors to connect routing groups in	11.3	Explore routing group connectors
Exchange Server.	11.4	Be able to track message paths
10 5	40.4	
12. Demonstrate how to use Exchange		Explore Outlook features
Management Shell to configure routing group.		Explore Outlook service options
		Explore Outlook profiles
		Be able to support offline Outlook use
		Describe synchronisation
		Explore Outlook Express protocols
	12.7	Outline Exchange Server internet
		protocols
13. Demonstrate how install chat service in	13.1	Explore chat service feature
Exchange server.		Be able to control connections to
Exchange server.		communities
		Be able to create channels
		Outline performance monitor counters
	13.5	Be able to configure chat settings
14. Describe how Exchange Server and	14.1	Explore instant messaging architecture
Microsoft Outlook Web App deliver a rich, access	14.2	Outline client logon process
email, voicemail, instant messages, and SMS text	14.3	Be able to install instant messaging
messages.	14.5	Outline firewall topology settings
15. Describe Anti-virus and email security	15.1	Explore ways of protecting information
software for Microsoft Exchange Server that		Describe Public Key Infrastructure (PKI)
protects against email viruses, exploits and		concepts
		Outline Windows PKI services and
trojans.		
		security protocols
		Outline Certificate Authority (CA) models
		Be able to revoke certificates
		Explore Exchange Key Management
		Service (KMS)
16. Define foreign mail system and	16.1	Outline Foreign Mail Systems
demonstrate how to use X.400 to connect	16.2	Be able to create X.400 connector
Exchange to foreign mail system	16.3	Be able to configure MS-Mail connector
		Explore cc:Mail concepts
17. Describe how to monitor Exchange	17.1	Be able to setup diagnostic logging
servers demonstrate how to automates online		Explore event viewer utility
maintenance tasks.		Explore Exchange Server performance
mamenance tasks.		and scalability counters
		Be able to backup Exchange Server
		information
	17.5	Explore backup strategies
	17.6	Be able to restore Exchange Server
		database
	17.7	Outline Exchange Server troubleshooting
		tools
18. Demonstrate how to configure the legacy	18.1	Outline mixed-mode configuration
namespace and SSL requirements for co-existence		Explore Exchange site replication service
between different Exchange Servers.		Explore Exchange site replication service Explore Windows and Exchange Server
between unferent Exchange Servers.		services
		Discuss co-existence issues
	10.4	Discuss co-existence issues

## Recommended Learning Resources: Windows Exchange Server

Text Books	<ul> <li>Exchange - A Practical Approach by Jaap Wesselius ISBN-10: 1906434328</li> <li>Microsoft Exchange Server Best Practices by Siegfried Jagott and Joel Stidley ISBN-10: 0735627193</li> <li>Microsoft Exchange Server Inside Out by Tony Redmond ISBN-10: 0735640610</li> </ul>
Study Manuals	BCE produced study packs
CD ROM	Power-point slides
Software	Windows Exchange Server