

## **Syllabus**

### **Computer Science Information Technology 982**

#### **Installing and Configuring Windows Server 2012 (70-410)**

Course: CSIT982, Section: 8026, Fall 2015, 3 Units

Instructor: Associate Professor Marcus Butler, CCNA, MCSE, VCP5

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Phone: 310.287.4447

Office Hours: Tuesday, Wednesday, Thursday from 3pm to 5pm

### ***Introduction***

The Microsoft Certification Program helps IT professionals and information workers increase their competitive edge while demonstrating their commitment to advancing their IT skills and Microsoft Office skills. Easily recognizable by hiring managers and well accepted as industry standards, Microsoft Certifications can help accelerate careers and open opportunities not previously attainable. Learn more about the Microsoft Certification Program benefits, community, and offerings.

In the 15-plus years since Microsoft launched what is now called the Microsoft Certification Program, millions of people have earned Microsoft Certifications—taking advantage of the growing demand for IT professionals, developers, and information workers who understand and know how to work with Microsoft technology. Today, that demand continues to grow as Microsoft expands into an even greater number of markets and regions.

The Microsoft Certification Program has also adapted to the realities of the market, which are that software requirements, applications, and administration have changed over the years. Software is more complex, interdependent, and central to businesses of all kinds. Workers dealing with Microsoft technologies have become more experienced, well informed, and sophisticated, and job roles are more diverse and specialized.

## ***Course Description***

This course is part one in a series of three courses that provides the skills and knowledge necessary to implement a core Windows Server 2012 infrastructure in an existing enterprise environment.

The three courses collectively cover implementing, managing, maintaining and provisioning services and infrastructure in a Windows Server 2012 environment. Although there is some cross-over of skills and tasks across these courses, this course focuses on the initial implementation and configuration of core services, such as Networking, Storage, Active Directory Domain Services (AD DS), Group Policy, File and Print Services, and Hyper-V.

This course maps directly to and is the preferred choice for hands-on preparation for the Microsoft Certified Solutions Associate (MCSA) Exam [410: Installing and Configuring Windows Server 2012](#), which is the first of three exams required for the MCSA: Windows Server 2012 credential.

## ***Audience Profile:***

This course is intended for information technology (IT) professionals who have some knowledge and experience working with Windows operating systems and who want to acquire the skills and knowledge necessary to install and perform the initial configuration of a Windows Server 2012 or Windows Server 2012 R2 server in an existing Windows server environment. Typically, candidates who are interested in attending this course include:

- Windows Server administrators who are relatively new to Windows Server administration and related technologies who are looking to learn more about Windows Server 2012 and Windows Server 2012 R2.
- IT professionals who are experienced in other non-Microsoft technologies, who meet the course prerequisites and are looking to cross-train on Windows Server 2012 and Windows Server 2012 R2.
- IT professionals who are looking to take the Microsoft Certified Solutions Associate (MCSA) [410: Installing and Configuring Windows Server 2012](#) exam.
- IT professionals who want to take the Microsoft Certified Solutions Expert (MCSE) exams in DataCenter, Desktop Infrastructure, Messaging, Collaboration and Communications will also be interested in taking this course as they prepare for the Microsoft Certified Solutions Associate (MCSA) exams. These are a prerequisite for their individual specialties.

## ***Course Student Learning Outcomes – SLO's***

After completing this course, successful students will be able to:

- Install and configure Windows Server 2012.
- Describe AD DS.
- Manage Active Directory objects.
- Automate Active Directory administration.
- Implement IPv4.
- Implement Dynamic Host Configuration Protocol (DHCP).
- Implement Domain Name System (DNS).
- Implement IPv6.
- Implement local storage.
- Implement file and print services.
- Implement Group Policy.
- Secure Windows servers by using Group Policy Objects (GPOs).
- Implement server virtualization by using Hyper-V.

## ***Course Prerequisites and Corequisites***

**Before attending this course, students should have:**

This course requires that student meet the following prerequisites, including that they have:

- An understanding of networking fundamentals.
- An understanding of basic AD DS concepts.
- An awareness and understanding of security best practices.
- Basic knowledge of server hardware.
- Experience working with, and configuring, Windows client operating systems, such as Windows 7 or Windows 8.

Additionally, students would benefit from having some previous Windows Server operating system experience.

## ***Course Requirements and Expectations***

- (1) It is your responsibility to drop the class; failure to drop the class in a timely manner will result in a "W" or "F" on your record. The instructor may drop you, as well for inactivity.
- (2) You have approximately 10 days to purchase the required material.
- (3) General course information is available under the "Modules" link.
- (4) You must use LabSim to view multimedia lectures, view demonstrations, complete lab exercises, and take the LabSim official course exams.
- (5) There are currently four official course exams. Each exam covers two or three chapters. The official course exams are different from the LabSim Practice exams. Due dates for exams and assignments are posted in the course syllabus. Exams are available on average for a seven-day period. Each exam will start at 6:00am and will be available until 11:00pm on the last day an exam is available. Each exam is timed for 60 minutes or less depending on the number of questions. Exams will typically consist of multiple choice and true/false questions. THERE IS NO MAKE-UP or EXAM RE-TAKE. Late exams are accepted in moderation. You will prepare for exams by using the materials provided in LabSim and the textbook.
- (7) Once the course begins all questions, issues, or problems should be brought to my attention by you will use "Private Messages" on the left-hand menu to communicate with each other. In other words after the course start date do not sent emails related to this course to my WLAC email address.
- (8) Lab Simulations and Demos are very important to skill development. Exam Simulation has answers and explanations which help to build your knowledge base.
- (9) All other college/class rules will be enforced.

## Required Materials

### Required Software: TestOut's "LabSim" training software.

Consisting of:

- Course Simulation (multimedia lectures)
- Lab Simulation (hands-on lab exercises)
- Exam Simulation (contents-based practice exams)

The screenshot shows the TestOut website for the LabSim 70-646 Course Suite. The page features a navigation menu with categories like MCSE, MCITP, MCTS, SSCP, CISSP, CCNA, CCNP, Linux+, Server+, A+, Security+, and Network+. The main content area is titled "MCITP - Windows Server 2008 Server Administrator" and includes a description of the course, a table of contents, and a "Buy Now" button. The table of contents lists the following items:

LabSim 70-646 Course Suite Includes:	
Training Videos	51
Lab Simulation Exercises	32
Demonstrations	43
Written Lessons	72
Section Quizzes	43
Exam Quizzes	220
Practice Certification Exam	Included
Estimated Time to Complete	40-50 hrs

The "Buy Now" sidebar shows the price as \$495 and includes an "ADD TO CART" button. A "Free Trial" offer is also visible. The page is viewed in Internet Explorer, and the Windows taskbar is visible at the bottom.

Product Overview: <http://www.testout.com/home/it-certification-training/labsim-certification-training/mcsa/windows-server-pro-install-and-configure>

Use the following instructions to place your order directly with TestOut:

What to order: Testout Windows Server Pro: Install and Configure (Exam: 70-410)

Where to order: [www.testout.com](http://www.testout.com)

Promotional Code: 14-346TA

School Name: West Los Angeles College (enter exactly as shown)

Instructor Name: Marcus Butler

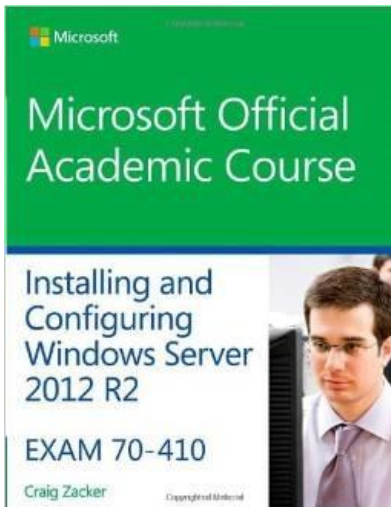
This software requires Internet access. Academic pricing: \$89.

If you have any problem with ordering online you can reach Kelly Jorgensen at [KJorgensen@testout.com](mailto:KJorgensen@testout.com) or call 800.877.4889, Ext 234.

## **Required Textbook: (Highly recommended for course and exam prep)**

MOAC Installing and Configuring Windows Server 2012 R2 Exam 70-410 [paperback]

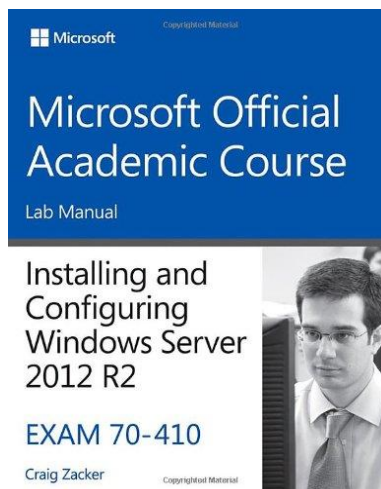
Wiley, 1<sup>st</sup> Edition, 2015 ISBN-13: 978-1-118-88231-3



## **Lab Manual: (Essential when completing labs using NetLAB)**

MOAC Lab Manual - Installing & Configuring Windows Server 2012 R2 Exam 70-410 [paperback]

Wiley, 1<sup>st</sup> Edition, 2015 ISBN-13: 978-1-118-88229-0



The textbook and lab manual can be purchased online at the WLAC online bookstore. Simply visit [www.wlac.edu](http://www.wlac.edu). Select "Services for Students", and then select "Bookstore". The previous steps actually take you to: <http://store450.collegestoreonline.com> if you wish to go there directly then you can select this URL.

## ***CS982 - Cross Reference Table***

“LabSim Modules” to “Textbook Lessons” Mapping

<b>LabSim Modules</b>	<b>Textbook Lessons</b>
LabSim M1 – Introduction	
LabSim M2 – Installation/Configuration	L1 – Installing Servers L2 – Configuring Servers L3 – Configuring Local Storage
LabSim M3 – Hyper-V	L7 – Creating and Configuring Virtual Machine Settings L8 – Creating and Configuring Virtual Machine Storage L9 – Creating and Configuring Virtual Networks
LabSim M4 – Active Directory	L13 – Installing Domain Controllers L14 – Creating and Managing AD Users and Computers
LabSim M5 – DNS	L12 – Deploying and Configuring the DSN Service
LabSim M6 – File and Share Access	L4 – Configuring File and Share Access
LabSim M7 – Print & Document Services	L5 – Configuring Print and Document Services
LabSim M8 – Group Policy	L15 – Creating and Managing AD Groups and OUs L16 – Creating Group Policy Objects
LabSim M9 – Networking	L10 – Configuring IPv4 and IPv6 Addressing
LabSim M10 – DHCP	L11 – Deploying and Configuring the DHCP Service

## ***CS982 Schedule for Assignments & Exams***

Please observe the start (S:) and due (D:) dates for assignments and exams:

WEEK	DATES	CHAPTERS	ASSIGNMENTS	EXAMS
1 <sup>ST</sup>	8/31/2015	LabSim M1 – Introduction	Assignment – M1 (S:8/31 – D:9/6)	
2 <sup>ND</sup>	9/07/2015	LabSim M2 – Installation/Configuration	Assignment – M2 (S:9/7 – D:9/20)	
3 <sup>RD</sup>	9/14/2015	LabSim M2 – Installation/Configuration		
4 <sup>TH</sup>	9/21/2015	LabSim M3 – Hyper-V	Assignment – M3 (S:9/21 – D:9/27)	E1 - M1/M2/M3 (S:9/25 –D: 10/4)
5 <sup>TH</sup>	9/28/2015	LabSim M4 – Active Directory	Assignment – M4 (S:9/28 – D:10/11)	
6 <sup>TH</sup>	10/05/2015	LabSim M4 – Active Directory		
7 <sup>TH</sup>	10/12/2015	LabSim M5 – DNS	Assignment – M5 (S:10/12 – D:10/18)	E2 – M4/M5 (S:10/16 –D: 10/25)
8 <sup>TH</sup>	10/19/2015	LabSim M6 – File and Share Access	Assignment – C6 (S:10/19 – D:11/1)	
9 <sup>TH</sup>	10/26/2015	LabSim M6 – File and Share Access		
10 <sup>TH</sup>	11/02/2015	LabSim M7 – Print/ Document Services	Assignment – M7 (S:11/2 – D:11/8)	E3 – M6/M7 (S:11/6 –D: 11/15)
11 <sup>TH</sup>	11/09/2015	LabSim M8 – Group Policy	Assignment – M8 (S:11/9 – D:11/22)	
12 <sup>TH</sup>	11/16/2015	LabSim M8 – Group Policy		
13 <sup>th</sup>	11/23/2015	LabSim M9 - Networking	Assignment – M9 (S:11/23 – D:12/6)	
14 <sup>th</sup>	11/31/2015	LabSim M10 – DHCP	Assignment – M10 (S:11/31 – D:12/20)	
15 <sup>th</sup>	12/07/2015	LabSim M10 – DHCP		E4 – M8/M9/M10 (S:12/14 –D: 12/21)
16 <sup>th</sup>	12/14/2015	<b>Final Exam Week</b>		
	12/20/2015	<b>Semester Ends</b>		



## Course Point Table

ASSIGNMENTS	POINTS
<b>LabSim Lab Exercises:</b>	
1.2.3 Explore the Windows 2008 R2 User Interface	10
1.3.4 Explore the Windows 2012 User Interface	10
2.6.4 Configure NIC Teaming	10
2.7.7 Configure Volumes	10
2.7.8 Configure Fault Tolerant Volumes	10
2.7.9 Create a Mount Point	10
2.8.6 Create a Storage Pool	10
3.1.5 Create Virtual Machines	10
3.2.7 Create Virtual Hard Disks	10
3.2.8 Create a Parent Virtual Machine	10
3.2.9 Create Child Virtual Machines	10
3.3.6 Create Virtual Switches	10
3.3.10 Prepare a Production Virtual Machine	10
4.4.4 Create OUs	10
4.4.5 Delete OUs	10
4.5.7 Create User Accounts	10
4.5.8 Manage User Accounts	10
4.7.5 Create Computer Accounts	10
4.8.4 Create Global Groups	10
4.8.5 Create Distribution Group	10
4.8.6 Change the Group Scope	10
4.8.7 Implement a Group Strategy	10
4.9.4 Delegate Administrative Control	10
5.1.4 Configure Search Suffixes	10
5.2.7 Configure Forwarders	10
5.2.8 Create a Root Zone	10
5.3.7 Create an Active Directory-Integrated Zone	10
5.3.8 Convert a Zone to Active Directory-Integrated	10
5.4.4 Create a Zone and Add Records	10
5.4.5 Create CNAME Records	10
<b>SUB-TOTAL LABSIM ASSIGNMENT POINTS:</b>	<b>300</b>

EXAMS	POINTS
<b>LabSim Labs Exercises:</b>	
6.1.5 Configure NTFS Permissions	10
6.1.6 Remove Inherited Permissions	10
6.1.7 Enable Quota Restrictions	10
6.1.8 Create a Quota Entry	10
6.1.9 Modify Quota Limits	10
6.2.4 Enable Shadow Copies	10
6.2.5 Restore Previous Version 1	10
6.2.6 Restore Previous Version 2	10
6.3.5 Share a Folder with a Second Name	10
6.3.6 Remove a Shared Folder	10
6.3.7 Enable Share Caching	10
6.3.8 Disable Share Caching	10
6.3.9 Configure Share Permissions	10
6.5.3 Configure NTFS and Share Permissions 1	10
6.5.4 Configure NTFS and Share Permissions 2	10
7.1.6 Create and Share a Printer	10
7.2.4 Configure Printer Pooling	10
7.2.5 Restrict Printer Access	10
7.2.6 Deploy Printers with Group Policy	10
8.1.7 Create and Link a GPO	10
8.1.8 Create a Starter GPO	10
8.3.4 Configure Account Password Policies	10
8.4.4 Configure Audit Policies	10
8.5.4 Configure User Rights	10
8.6.8 Enforce User Account Control	10
8.7.4 Configure Restricted Groups	10
8.9.6 Configure AppLocker	10
9.1.6 Configure IP Settings	10
9.3.4 Configure IPv6	10
10.1.5 Install and Configure a DHCP Server	10
10.1.6 Configure DHCP Options	10
10.2.4 Create Exclusion Ranges	10
10.2.5 Create Client Reservations	10
10.3.4 Configure a DHCP Relay Agent	10
10.3.5 Add a DHCP Server on Another Subnet	10
10.4.5 Configure Automatic and Alternate Addressing	10
<b>TOTAL LABSIM EXAM POINTS:</b>	<b>360</b>

## ***Course Point Table***

ETUDES EXAMS	POINTS
<b>ETUDES Official Course Exams:</b>	
Exam-1: Chapter-1 and Chapter-2	100
Exam-2: Chapter-3 and Chapter-4	100
Exam-3: Chapter-5 and Chapter-6	100
Exam-4: Chapter-7 and Chapter-8	100
<b>Total Official Exam Points:</b>	400

## ***Course Grading Scale***

There are a total of 1060 points possible for this course as indicated by the tables above. The total is based on 66 LabSim lab exercises (660 points), and four official course exams (400 points).

COURSE GRADE	POINT RANGE	% RANGE
"A"	1060 – 954	100% - 90%
"B"	953 – 848	89% - 80%
"C"	847 – 742	79% - 70%
"D"	741 – 636	69% - 60%
"F"	635 - 0	59% - 0

## ***Instructor's Incomplete Policy***

The request for an Incomplete is a common one. I have a formal and consistent policy to determine whether an incomplete makes academic sense and is possible.

- 1) My position is that a student who has successfully completed more than 75% of the course work and has a justifiable explanation should be considered for an Incomplete.
- 2) A student who has not successfully completed 75% or more and does not have justifiable circumstances would either be dropped (if possible), failed, or given a grade based on the course work submitted to date.

## ***Methods of Evaluation***

All exercises and exams are given a point assessment. The requirements to receive full credit for any exercise or exam are provided below:

### **LabSim Exercises (Labs) - requirements to receive full credit:**

- Successfully perform all steps
- Scores can be reviewed in the LabSim grade book
- Can be repeated until 100% is achieved
- Exercises are automatically graded by the LabSim system upon submission

### **LabSim Practice Exams – optional, not required**

- Use practice exams to prepare for the LabSim official course exams
- Questions are similar on both exams

### **LabSim Official Course Exams – requirements to receive full credit**

- Answer all questions correctly
- Take and complete the exam when scheduled
- Scores can be reviewed in the LabSim grade book
- Exams are automatically graded by the LabSim system upon submission

## ***Instructor Response Policy***

Students must communicate with me directly using the ETUDES Message system after the course has started. Do not send multiple messages or send the same message to my various email addresses. This may actually delay a response. I will make every effort to respond within 48 hours or less on average.

## ***Drop Policy***

If you choose to drop a course, it is your responsibility to do so by the end of the second week of class if you wish to receive a tuition refund. For compressed eight week semesters, you must drop by the end of the first week to receive a tuition refund. You will not be automatically dropped from your class for lack of participation.

If you drop a class after the fourth week of the semester has passed, you will receive a "W" grade for that class. If you drop a class after the tenth week has passed, you will receive an "F" grade for that class. If you drop a class after the second week has passed in a compressed eight week semester, you will receive a "W" grade for that class. If you drop a class after the fifth week has passed in a compressed eight week semester, you will receive an "F" grade in that class.

### ***Important Drop Dates for Fall 2015:***

- Get a full refund: 9/11/15
- Last day to add a class:
  - Online: 8/30/15
  - In-person: 9/11/15
- File for "pass/no pass": 9/11/15
- Drop class without a "W": 9/11/15
- Drop class with a "W": 11/20/15

## ***Special Needs and Disabled Students Policy***

If you are a student with a disability and require accommodations, please send me a Private Message. The sooner I am aware of your eligibility for accommodations, the quicker I will be able to assist the Disabled Students Programs & Services (DSP&S) Office in providing them. The DSP&S Office provides special assistance in areas including: registration assistance specialized tutoring, academic and career guidance counseling, instructor liaison, special instruction and testing assistance. You can contact the Director of the DSP&S Office, Nancy Brambila, at [brambin@wlac.edu](mailto:brambin@wlac.edu) describing the accommodations that are necessary.

## ***Academic Integrity Statement***

Academic integrity is a fundamental value of higher education and WLAC; therefore, acts of cheating, plagiarism, falsification or attempts to cheat, plagiarize or falsify will not be tolerated in this course. It is your responsibility to understand what plagiarism is and you can read about it here: <http://www.plagiarism.org>.

Any student caught cheating or plagiarizing will be subject to disciplinary action.

## ***Technical Requirements***

Please carefully review the ETUDES system requirements located at: <https://etudes-ng.fhda.edu/portal/site/!gateway/page/4243c7b4-9b68-45fc-0016-148ad08653aa>. Make sure you have configured your computer correctly before the course starts.

## ***Online Student Resources***

Online Student Helpdesk:	<a href="http://www.wlac.edu/online/helpdesk.asp">http://www.wlac.edu/online/helpdesk.asp</a>
Course Login:	<a href="http://www.wlac.edu/online/logininfo.asp">http://www.wlac.edu/online/logininfo.asp</a>
Technical Requirements:	<a href="https://etudes-ng.fhda.edu/portal/site/!gateway/page/4243c7b4-9b68-45fc-0016-148ad08653aa">https://etudes-ng.fhda.edu/portal/site/!gateway/page/4243c7b4-9b68-45fc-0016-148ad08653aa</a>
ETUDES FAQ:	<a href="http://www.wlac.edu/online/etudesfaq.asp">http://www.wlac.edu/online/etudesfaq.asp</a>
WLAC Homepage:	<a href="http://www.wlac.edu">http://www.wlac.edu</a>
WLAC Online Homepage:	<a href="http://www.wlac.edu/online">http://www.wlac.edu/online</a>
WLAC Online Counseling:	<a href="http://www.wlac.edu/online/counselingonline.asp">http://www.wlac.edu/online/counselingonline.asp</a>
WLAC Online Tutoring:	<a href="http://www.wlac.edu/online/tutoring.asp">http://www.wlac.edu/online/tutoring.asp</a>
WLAC Library:	<a href="http://www.wlac.edu/library/index.html">http://www.wlac.edu/library/index.html</a>
WLAC Bookstore:	<a href="http://store450.collegestoreonline.com">http://store450.collegestoreonline.com</a>
Netiquette:	<a href="http://www.albion.com/netiquette/corerules.html">http://www.albion.com/netiquette/corerules.html</a>
Strategies for Online Learners:	<a href="http://www.uidaho.edu/eo/dist8.html">http://www.uidaho.edu/eo/dist8.html</a>
Be a Successful Online Student:	<a href="http://www.ion.uillinois.edu/resources/tutorials/pedagogy/StudentProfile.asp">http://www.ion.uillinois.edu/resources/tutorials/pedagogy/StudentProfile.asp</a>
Tips for Online Success:	<a href="http://www.ion.uillinois.edu/resources/tutorials/pedagogy/tips.asp">http://www.ion.uillinois.edu/resources/tutorials/pedagogy/tips.asp</a>