This course supports the assessments for Server Administration. The course covers 8 competencies and represents 6 competency units.

Introduction

Overview
Welcome to the Windows Server 2008 R2 Server Administration Course. Microsoft Windows Server 2008 is one of the most widely used Windows server operating systems in the industry today. This system provides robust functions of computing that no other Windows Server operating system has previously provided. Successfully mastering Windows Server 2008 R2 is beneficial for a number of reasons, including the following:

- The opportunity to become an expert in the field of information technology
- The ability to improve productivity through installation, configuration, and troubleshooting
- The chance to learn how to plan within, implement, troubleshoot, and maintain a Microsoft Windows Server 2008 R2 network environment

If you have prior experiences with other Microsoft server operating systems, including Windows NT Server 4.0, Windows 2000 Servers/Advance Servers, and/or Windows Server 2003, it will be relatively easy for you to command Windows Server 2008 R2, as it inherits many attributes from those earlier operating systems.

Watch the following video for an introduction to this course:

Note: To download this video, right-click the following link and choose “Save as...”: download video.

Competencies
This course provides guidance to help you demonstrate the following 8 competencies:

- Competency 429.1.1: Server Installation and Configuration
  The graduate plans strategies for the migration, commission, and decommission of servers.
- Competency 429.1.2: Server Commission and Decommission
  The graduate recommends appropriate methods for controlling accessing data and information and for authenticating users and groups in gaining that access.
- Competency 429.1.3: Long-Term Server and System Management
  The graduate develops long-term strategies for server management in various networks.
- Competency 429.1.4: Server Monitoring and Maintenance
  The graduate monitors and maintains servers on various networks.
- Competency 429.1.5: Deployment of Roles for Application Servers
  The graduate plans for deployment of applications servers in a given network based on customer requirements.
- Competency 429.1.6: Business Continuity and Disaster Recovery
The graduate plans for business continuity and disaster recovery in the event of network failures and clearly articulates backup and recovery processes.

- **Competency 429.1.7: High Server Availability**
  The graduate plans for high server availability in network environments.

- **Competency 429.1.8: Server & Network Troubleshooting**
  The graduate troubleshoots servers and networks in enterprise environments.

**Course Instructor Assistance**
As you prepare to successfully demonstrate competency in this subject, remember that course instructors stand ready to help you reach your educational goals. As subject matter experts, mentors enjoy and take pride in helping students become reflective learners, problem solvers, and critical thinkers. Course instructors are excited to hear from you and eager to work with you.

Successful students report that working with a course instructor is the key to their success. Course instructors are able to share tips on approaches, tools, and skills that can help you apply the content you’re studying. They also provide guidance in assessment preparation strategies and troubleshoot areas of deficiency. Even if things don’t work out on your first try, course instructors act as a support system to guide you through the revision process. You should expect to work with course instructors for the duration of your coursework, so you are welcome to contact them as soon as you begin. Course instructors are fully committed to your success!

**Preparing for Success**

The information in this section is provided to detail the resources available for you to use as you complete this course.

**Learning Resources**
The learning resources listed in this section are required to complete the activities in this course. For many resources, WGU has provided automatic access through the course. However, you may need to manually enroll in or independently acquire other resources. Read the full instructions provided to ensure that you have access to all of your resources in a timely manner.

If you decide to use other learning resources, particularly those found online, make certain that none qualify as a brain-dump. Using them can result in academic sanctions and loss of your certification.

**Automatically Enrolled Learning Resources**

You can access the learning resources listed in this section by clicking on the links provided throughout the course. You may be prompted to log in to the WGU student portal to access the resources.

**CBT Nuggets**
You will have access to instructional videos provided by the following CBT Nuggets course:

- **(70-646) - Server Administration**
You will have direct access to the home page of this resource, and will have to navigate to the specific modules indicated for each activity.

**Transcender Practice Exams**
You will access the following resource from Transcender at the activity level within this course:

- **Cert-70-646| MSCert: PRO - Windows Server 2008, Server Administrator**

Use this resource liberally. You can set your own custom settings, so try using it as a preassessment to test each specific Microsoft exam. You can set up flashcard practice throughout each week and also use it as a postassessment. Contact your course instructor if you need extra help setting up and/or changing your settings.

*Note: The online version of the Transcender learning resource is provided to you by WGU as part of your enrollment. If you wish to use the offline version, you may purchase it yourself from Transcender.*

**MeasureUp Lab Environment**
Use the MeasureUp lab simulations to work through and practice the exam content.

*Note: The Measureup lab experience can be much like going to a computer lab; there are occasions when there is a line to be able to get access to a machine, and there can also be a wait time for the lab to load. Load times usually take around 30 seconds. A wait time for the specific lab you would like to enter may take about 10 minutes and you can be emailed a lab-availability notification should you request one.*

**OPTIONAL: Review additional material**

- **Pluralsight (90-day free trial)**

**STUDY TIPS**

- It is recommended that you work with the MeasureUp lab technologies as the CBT Nuggets’ instructor is speaking. Pause the videos when you need more time to set up your own environment.
- Although the section for the Transcender practice exams is listed toward the end of the course, there are features within the program that allow you to set up your own preferences for flashcards and practice; this is a good tool to use throughout your studies in this course. It is customizable as your knowledge progresses, and might also serve as a good self-preassessment.

**Pacing Guide**
The pacing guide suggests a weekly structure to pace your completion of learning activities. It is provided as a suggestion and does not represent a mandatory schedule. Follow the pacing guide carefully to complete the course in the suggested timeframe.
**Pacing Guide: Server Administration**

*Note: This pacing guide does not replace the course. Please continue to refer to the course for a comprehensive list of the resources and activities.*

**Planning for Server Deployment**

The content and practice provided in this section represents **19%** of the total 70-646 exam.

**Planning for Server Deployment**

This section addresses the following competencies:

- **Competency 429.1.1: Server Installation and Configuration**
  The graduate plans strategies for the migration, commission, and decommission of servers.

- **Competency 429.1.2: Server Commission and Decommission**
  The graduate recommends appropriate methods for controlling accessing data and information and for authenticating users and groups in gaining that access.

This topic highlights the following objectives:

- planning server installations and upgrades
- planning for automated server deployment
- planning infrastructure services server roles
- planning application servers and services
- planning file and print server roles

**Complete: CBT Nuggets Module**

The following [CBT Nuggets](https://www.cbt nuggets.com) module covers content for the matched exam objective items:

- Plan Server Installations and Upgrades Part 1
- Plan Server Installations and Upgrades Part 2
- Plan for Automated Server Deployment
- Windows Activation
- IPv6
- DHCP
- DNS
- What's New in R2: File and Print Services

**Complete: MeasureUp Lab**

Complete the following MeasureUp lab:

- [Planning for Server Installation and Upgrade](https://www.measureup.com)

**Complete: Transcender Optimized Test**

Click the following link and take the optimized test as noted.
Planning for Server Management

The content and practice provided in this section represents 23% of the total 70-646 exam.

This section addresses the following competency:

- **Competency 429.1.3: Long-Term Server and System Management**
  The graduate develops long-term strategies for server management in various networks.

This topic highlights the following objectives:

- planning server management strategies
- planning for delegated administration
- planning and implementing group policy strategy

**Complete: CBT Nuggets Module**

The following CBT Nuggets module covers content for the matched exam objective items:

- Directory Services: Read-Only Domain Controllers
- Certificate Authority Part 1
- Certificate Authority Part 2
- What's New in R2: Certificate Authorities
- Storage and Print Servers
- Server Management
- Group Policy Objects
- What's New in R2: Group Policy Objects
- What's New in R2: Active Directory Recycle Bin and Offline Domain Join

**Complete: MeasureUp Lab**

Complete the following MeasureUp lab:

- **Planning for Server Management**

**Complete: Transcender Optimized Test**

Click the following link and take the optimized test as noted.

**Monitoring and Maintaining Servers**

The content and practice provided in this section represents 20% of the total 70-646 exam.

This section addresses the following competencies:
• **Competency 429.1.4: Server Monitoring and Maintenance**
  The graduate monitors and maintains servers on various networks.

• **Competency 429.1.8: Server & Network Troubleshooting**
  The graduate troubleshoots servers and networks in enterprise environments.

This topic highlights the following objectives:

• implementing patch management strategy
• monitoring servers for performance evaluation and optimization
• monitoring and maintaining security and policies

**Complete: CBT Nuggets Module**

The following [CBT Nuggets](#) module covers content for the matched exam objective items:

• Monitoring Servers
• Security
• RRAS and NAP
• Patch Management
• What’s New in R2: Security and Deployment

**Complete: MeasureUp Lab**

Complete the following MeasureUp lab:

• [Monitoring and Maintaining Servers](#)

**Complete: Transcender Optimized Test**

Click the following link and take the optimized test as noted.

• [Monitoring and Maintaining Servers](#)

**Planning Application and Data Provisioning**

The content and practice provided in this section represents **19%** of the total 70-646 exam.

**Planning Application and Data Provisioning**

This section addresses the following competencies:

• **Competency 429.1.5: Deployment of Roles for Application Servers**
  The graduate plans for deployment of applications servers in a given network based on customer requirements.

• **Competency 429.1.7: High Server Availability**
  The graduate plans for high server availability in network environments.

This topic highlights the following objectives:

• provisioning applications
• provisioning data
Complete: CBT Nuggets Module

The following CBT Nuggets module covers content for the matched exam objective items:

- Application Servers and Services
- Provision Applications

Complete: MeasureUp Lab

Complete the following MeasureUp lab:

- Planning Data Provisioning

Complete: Transcender Optimize Test

Click the following link and take the optimized test as noted.

- Planning Application and Data Provisioning

Planning for Business Continuity and High Availability

The content and practice provided in this section represents 19% of the total 70-646 exam.

Planning for Business Continuity and High Availability

This section addresses the following competency:

- Competency 429.1.6: Business Continuity and Disaster Recovery
  The graduate plans for business continuity and disaster recovery in the event of network failures and clearly articulates backup and recovery processes.

This topic highlights the following objectives:

- planning storage
- planning high availability
- planning for backup and recovery

Complete: CBT Nuggets Module

The following CBT Nuggets module covers content for the matched exam objective items:

- Backup and Recovery
- High Availability

Complete: MeasureUp Lab

Complete the following MeasureUp lab:

- Planning for Business Continuity and High Availability

Complete: Transcender Optimize Test

Click the following link and take the optimized test as noted.
Final Steps

Congratulations on completing the activities in this course! This course has helped prepare you to complete the associated assessments. If you have not already been directed to complete the assessments, schedule and complete your assessments now.

**First Attempt Checklist**

One of the many things that makes WGU unique is its competency based education model. If you know the material, all you have to do is prove it by passing the exam. If you can do this, you can accelerate the receipt of your degree.

To make sure you have the best chance possible to pass the exam on your first attempt, **the following should be completed before you refer to take it:**

1. Read, review, and/or utilize all of the learning resources: CBT Nuggets, MeasureUp and Transcender Practice exams. These resources are some of the best in the industry at helping you prepare for this difficult assessment. Do not skip anything.
2. Take a Transcender randomized practice exam. Based on the score report of this practice exam, revisit the CBT Nuggets materials for those areas indicated as needing additional study. When you review the practice exam results, select “Sort by Objective” as an option to help you focus on the objectives needing additional study.
3. Use your own hands-on lab, in conjunction with CBT Nuggets and MeasureUp, to review the objectives indicated by Transcender as needing additional study. This will help you gain additional familiarity with the technologies. Repeat this process until you can score 90% or higher at least 5 times on the Transcender randomized practice exam.
4. Contact a course instructor at cmMicrosoft@wgu.edu for additional resources and valuable test-taking strategies. This is very important, as a course instructor can provide valuable advice and save you time when you focus on exam preparation.

If the first attempt is failed, you will be required to get in contact with the course instructor to see what went wrong and how you can prepare to make sure your second attempt is a success. Once the course instructor feels you are ready to refer for the second attempt of the exam, he or she will approve your second exam referral. However, why not contact a course instructor **before** you make your first assessment attempt?