



This course supports the assessment for Accounting Information Systems. The course covers 8 competencies and represents 3 competency units.

## Introduction

### Overview

Welcome to Accounting Information Systems! This course introduces a variety of accounting information systems and internal controls necessary for effective systems. Students will learn how to document and evaluate the process flows of accounting information systems, evaluate internal controls within accounting systems, and use QuickBooks Online.

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 3025.1.1: Information Systems**  
The graduate explains the benefits of quality information and information systems.
- **Competency 3025.1.2: Accounting Information System (AIS) Processes**  
The graduate explains accounting information system processes.
- **Competency 3025.1.3: Documenting Processes and Controls**  
The graduate can apply methods of documenting processes and controls.
- **Competency 3025.1.4: Solving Business Problems**  
The graduate uses databases to solve business problems.
- **Competency 3025.1.5: IT Controls**  
The graduate demonstrates the ability to identify and use IT controls.
- **Competency 3025.1.6: Transaction Cycle Activities**  
The graduate explains the activities for each transaction cycle.
- **Competency 3025.1.7: Acquiring and Implementing an Accounting Information System**  
The graduate explains the processes for acquiring and implementing an accounting information system.
- **Competency 3025.1.8: Information System Auditing**  
The graduate explains how information systems are used in auditing.

### Course Instructor Assistance

As you prepare to 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 help you prepare for another attempt. You should expect to work with course instructors for the duration of your coursework, and you are encouraged 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 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.

#### Automatically Enrolled 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.

#### VitalSource E-Text

The following textbook is available to you as an e-text within this course. You will be directly linked to the specific readings required within the activities that follow.

- Romney, M.B. & Steinbart, P.J. (2015). *Accounting information systems. (13<sup>th</sup> ed.)* Upper Saddle River: Prentice Hall. Print ISBN: 978-0133428537

*Note: This e-text is available to you as part of your program tuition and fees, but you may purchase hard copies at your own expense through a retailer of your choice. If you choose to do so, please use the ISBN listed to ensure that you receive the correct edition.*

#### Study Journal

You will be asked to complete several activities in a study journal. Writing in a study journal is a good way to record notes, goals, and questions you have about the things you are learning. It can also help you to concentrate when you study, remember and understand information you are learning, and prioritize your time. This journal can be in paper or electronic form.

### 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: Accounting Information Systems](#)



*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.*

## Information Systems

This section introduces the essential role of accounting information systems. It introduces the functions and benefits that accounting information systems can provide for an organization.

### **Benefits of Quality Information and Information Systems**

In this section, you will examine the value of useful information and how an accounting information system can effectively manage information to streamline a variety of important business cycle activities.

This topic addresses the following competencies:

- **Competency 3025.1.1: Information System**  
The graduate explains the benefits of quality information and information systems.

This topic highlights the following objectives:

- Identify the traits of useful information.
- Identify what information a business needs in order to acquire capital, sell merchandise, and pay taxes.
- Describe the major transaction cycles.
- Describe the functions of an accounting information system (AIS).
- Explain how an accounting information system (AIS) can add value to an organization.
- Explain how an AIS may be used for a given primary or support activity in the value chain.

### **Information and Information Systems**

By the end of this activity, you should be able to recall:

- three business functions of an accounting information system (AIS)
- six ways an AIS can add value to an organization
- how an AIS may be used for any primary or support activity in the value chain

Read the following chapter in *Accounting Information Systems*:

- [Chapter 1 \("Accounting Information Systems, An Overview"\)](#)

Please view the following PowerPoint Presentation:

- [Chapter 1 self-paced presentation](#)

Take the following quiz:



- [Chapter 1 Quiz on pages 16-17](#)
  - After completing the quiz, you can check your answers on pages 22-23.

Answer the following questions in your study journal:

- [question 1.4 on page 19 \("Problems"\)](#)
- [question 1.8 on page 21 \("Problems"\)](#)

## Accounting Information System (AIS) Processes

To understand how an AIS works, it is essential to understand the data processing cycle.

### Accounting Information System (AIS) Processes

This section outlines the steps in the data processing cycle including data input, storage, processing, and output.

This topic addresses the following competencies:

- **Competency 3025.1.2: Accounting Information System (AIS) Processes**  
The graduate explains accounting information system processes.

This topic highlights the following objectives:

- Identify the steps in the data processing cycle.
- Describe each step in the data input process.
- Explain how data storage is accomplished within an AIS.
- Describe AIS data processing activities.
- Identify the types of information output produced by an AIS.

### The Data Processing Cycle

By the end of this activity, you should be able to recall:

- a basic overview of each step in the data processing cycle
- the three steps in the data input process
- data processing activities represented by the acronym C.R.U.D.

Read the following section in *Accounting Information Systems* (Note: you may skip the section on Enterprise Resource Planning Systems on p. 35-38):

- [Chapter 2 \("Overview of Transaction Processing"\)](#)

Please view the following PowerPoint presentation:

- [Chapter 2 self-paced presentation](#)

Take the following quiz (you may skip question 8):



- [Chapter 2 Quiz on pages 38-39](#)
  - After completing the quiz, you can check your answers on pages 45-47.

Answer the following question in your study journal:

- [question 2.5 on pages 41-42](#)

### **QuickBooks Fundamentals**

For this activity, you will need to register for a free 30-day trial version of QuickBooks Online Plus. You will not be required to enter any credit card information or make any payments. Sign up using the following link:

- [QuickBooks Online Plus Free Trial](#)

Watch the following video and then create a new account for a company (real or hypothetical) in QuickBooks:

- [First Use Experience](#)

Watch the following video to explore the basic features and navigation of QuickBooks, and then create a new invoice (real or hypothetical) in QuickBooks:

- [Introduction & Basic Navigation](#)

Watch the following video and then import a data file (you can use your own file or use the sample file that the video mentions) in QuickBooks:

- [Importing List Elements](#)

If you would like further practice with QuickBooks, you may access any of the following resources for further reference and tutorials:

- [QuickBooks Support](#)
- [Intuit Community](#)
- [Intuit Academy](#)
- [QuickBooks Online Training Videos](#)

## **Documenting Processes and Controls**

Documentation is essential for understanding and communicating how specific processes and controls work. It's important to be able to interpret and create the right documents for your organization.

### **Documenting Processes and Controls**

This section will teach you how to take a complex process and communicate it through a simple visual diagram or flowchart.



This topic addresses the following competencies:

- **Competency 3025.1.3: Documenting Processes and Controls**

The graduate can apply methods of documenting processes and controls.

This topic highlights the following objectives:

- Explain the purpose of documentation.
- Identify the tools used to complete documentation.
- Interpret a data flow diagram and its components.
- Interpret a document flowchart and its components.
- Interpret a system flowchart and its components.
- Interpret a program flowchart and its components.
- Identify the appropriate documentation tool for a given scenario.

### **Documentation**

By the end of this activity, you should be able to:

- interpret a data flow diagram, document flowchart, system flowchart, and program flowchart
- identify when to use a data flow diagram, and when to use a document, system, or program flowchart

Read the following section in *Accounting Information Systems*:

- [Chapter 3 \("Systems Documentation Techniques"\)](#)

Please view the following PowerPoint presentation:

- [Chapter 3 self-paced presentation](#)

Take the following quiz:

- [Chapter 3 Quiz on pages 64-65.](#)
  - After completing the quiz, you can check your answers on pages 74-75.

Answer the following question in your study journal:

- [question 3.12 on pages 70-71](#)

Complete the following activity:

- Create and label a simple data flow diagram. The diagram must include each of the following:
  - at least one data source
  - at least one data destination



- data flows
- at least one transformation process
- at least one data store

\*You can either draw in your study journal or use a software program, such as Microsoft Word, Microsoft PowerPoint, or Visio. For further instructions, examples, and tools for designing diagrams and flowcharts, see <http://www.conceptdraw.com/examples/information-flow>.

## **Solving Business Problems**

An AIS is a highly effective tool for solving business problems. This section presents a variety of applications for solving business problems through technology.

### **Databases to Solve Business Problems**

You will explore the purpose and benefits of databases. You will also explore the components of databases and how queries function within databases.

This topic addresses the following competencies:

- **Competency 3025.1.4: Solving Business Problems**  
The graduate uses databases to solve business problems.

This topic highlights the following objectives:

- Describe the benefits of a database.
- Distinguish between primary keys and foreign keys in a database.
- Identify the appropriate query for a given task.

### **Databases**

By the end of this activity, you should be able to recall:

- the benefits of using a database
- the difference between a primary key and a foreign key

Read the following section in *Accounting Information Systems*:

- [Chapter 4 \(“Relational Databases”\) pages 82-88](#)

Please view the following PowerPoint presentation:

- [Chapter 4 self-paced presentation](#)

Answer the following prompt in your study journal:

- Give an example of a primary key and a foreign key from Table 4-8 on page 96.

### **Queries**



Read the following section in *Accounting Information Systems*:

- [Chapter 4 \(“Creating Relational Database Queries”\) pages 93-101](#)

Create a query that is relevant to your current job or a hypothetical job. Use Microsoft Access if you have it; if not, write a brief explanation in your study journal of how you would create the query.

## **IT Controls**

Data protection is imperative. IT controls are vital because they help protect crucial information for business organizations.

### **The Need for IT Controls**

In this section, you will explore the reasons behind why many companies fail to protect their data, and a variety of controls that companies can use to safeguard against data security failures.

This topic addresses the following competencies:

- **Competency 3025.1.5: IT Controls**  
The graduate demonstrates the ability to identify and use IT controls.

This topic highlights the following objectives:

- Describe common reasons for information system failure.
- Describe common reasons why data is not protected wisely.
- Describe key functions of internal controls.
- Compare the major frameworks designed to standardize and improve control processes.
- Describe the components of an internal environment.
- Describe approaches to assessing and managing risk within an organization.

### **Information System Failure and Internal Controls**

By the end of this activity, you should be able to recall:

- common reasons why data is not protected wisely
- the components of an internal framework
- ways that management can assess and respond to risk

Read the following section in *Accounting Information Systems*:

- [Chapter 7 \(“Control and Accounting Information Systems”\) pages 188-203](#)

Please view the following PowerPoint presentation:

- [Chapter 7 self-paced presentation](#)





Take the following quiz:

- [Chapter 7 Quiz on pages 214-215](#)
  - After completing the quiz, you can check your answers on pages 225-227.

Answer the following prompts in your study journal:

- List three reasons why organizations often do not adequately protect their data.
- List four ways management can respond to risk.

## Identifying IT Controls

This section will examine various types of IT controls, including preventative controls, detective controls, and corrective controls.

This topic addresses the following competencies:

- **Competency 3025.1.5: IT Controls**  
The graduate demonstrates the ability to identify and use IT controls.

This topic highlights the following objectives:

- Describe the different categories of control activities.
- Explain the steps an attacker may take to penetrate an information system.
- Identify security controls that help prevent threats from occurring.
- Identify security controls that detect intrusions.
- Identify security controls that correct intrusions.
- Identify the IT controls that are used to preserve confidentiality.
- Define spam and identity theft.
- Define encryption, hashing, and virtual private networks (VPNs).
- Identify the IT Controls used to safeguard processing integrity.

### Control Activities

By the end of this activity, you should be able to identify:

- the seven categories of control procedures

Read the following section in *Accounting Information Systems*:

- [Chapter 7 \(“Control Activities”\) pages 204-209](#)

### Preventive, Detective, and Corrective Controls

By the end of this activity, you should be able to identify:

- steps that an attacker may take to penetrate an information system
- examples of preventative controls
- examples of detective controls



- examples of corrective controls

Read the following section in *Accounting Information Systems*:

- [Chapter 8 \("Controls for Information Security"\) pages 232-250](#)

Please view the following PowerPoint presentation:

- [Chapter 8 self-paced presentation](#)

Take the following quiz (you may skip questions 1 and 10):

- [Chapter 8 Quiz on pages 252-253](#)
  - After completing the quiz, you can check your answers on pages 258-259.

### **Confidentiality**

By the end of this activity, you should be able to identify:

- IT controls that help preserve confidentiality

Read the following section in *Accounting Information Systems*:

- [Chapter 9 \("Confidentiality and Privacy Controls"\) pages 260-264](#)

Please view the following PowerPoint presentation:

- [Chapter 9 self-paced presentation](#)

### **Privacy and Encryption**

By the end of this activity, you should be familiar with the following key terms:

- spam
- identity theft
- encryption
- hashing
- virtual private networks (VPNs)

Skim the following section in *Accounting Information Systems* (it is not necessary to study this section deeply as long as you are familiar with the terms listed above):

- [Chapter 9 \("Confidentiality and Privacy Controls"\) pages 264-276](#)

### **Processing Integrity**

By the end of this activity, you should be familiar with:

- input controls



- processing controls
- output controls

Read the following section in *Accounting Information Systems*:

- [Chapter 10 \("Processing Integrity and Availability Controls"\) pages 286-292](#)

Please view the following PowerPoint presentation:

- [Chapter 10 self-paced presentation](#)

## **Transaction Cycle Activities**

The transaction cycle activities determine what an AIS does. This section examines these activities and puts the role of an AIS into context.

### **Business Processes**

In this section, you will obtain in-depth coverage of the four major transaction cycles: the revenue cycle, the expenditure cycle, the production cycle, and the human resources management/payroll cycle.

This topic addresses the following competencies:

- **Competency 3025.1.6: Transaction Cycle Activities**  
The graduate explains the activities for each transaction cycle.

This topic highlights the following objectives:

- Identify the purpose and basic activities of the revenue cycle.
- Describe the steps of the revenue cycle.
- Identify the purpose and basic activities of the expenditure cycle.
- Describe the steps of the expenditure cycle.
- Identify the purpose and basic activities of the production cycle.
- Describe the steps of the production cycle.
- Identify the purpose and basic activities of the human resources management (HRM)/payroll cycle.
- Describe the steps of the human resources management (HRM)/payroll cycle.

### **The Revenue Cycle**

By the end of this activity, you should be able to describe:

- the purpose of the revenue cycle
- the four steps in the revenue cycle

Skim the following section in *Accounting Information Systems* (it is not necessary to study this section deeply as long as you are familiar with the terms listed above):



- [Chapter 12 \("The Revenue Cycle"\) pages 338-365](#)

Please view the following PowerPoint presentation:

- [Chapter 12 self-paced presentation](#)

### **The Expenditure Cycle**

By the end of this activity, you should be able to describe:

- the purpose of the expenditure cycle
- the four steps in the expenditure cycle

Skim the following section in *Accounting Information Systems* (it is not necessary to study this section deeply as long as you are familiar with the terms listed above):

- [Chapter 13 \("The Expenditure Cycle"\) pages 378-402](#)

Please view the following PowerPoint presentation:

- [Chapter 13 self-paced presentation](#)

### **The Production Cycle**

By the end of this activity, you should be able to describe:

- the purpose of the production cycle
- the four steps in the production cycle

Skim the following section in *Accounting Information Systems* (it is not necessary to study this section deeply as long as you are familiar with the terms listed above):

- [Chapter 14 \("The Production Cycle"\) pages 414-434](#)

Please view the following PowerPoint presentation:

- [Chapter 14 self-paced presentation](#)

### **The HRM / Payroll Cycle**

By the end of this activity, you should be able to describe:

- the purpose of the HRM/payroll cycle
- the five steps in the HRM/payroll cycle

Skim the following section in *Accounting Information Systems* (it is not necessary to study this section deeply as long as you are familiar with the terms listed above):

- [Chapter 15 \("The Human Resources Management and Payroll Cycle"\) pages 442-461](#)



Please view the following PowerPoint presentation:

- [Chapter 15 self-paced presentation](#)

## Acquiring and Implementing an Accounting Information System

There are a variety of ways to acquire and implement an AIS. This section weighs the advantages and disadvantages of each.

### Acquiring and Implementing an AIS

In this section, you will explore options for acquiring an AIS, implementing an AIS, and evaluating AIS performance.

This topic addresses the following competencies:

- **Competency 3025.1.7: Acquiring and Implementing an Accounting Information System**  
The graduate explains the processes for acquiring and implementing an accounting information system.

This topic highlights the following objectives:

- Compare the strengths and limitations of purchasing, developing in-house, and outsourcing an AIS.
- Explain how a well-designed AIS can help identify business problems and potential resolutions.
- Describe the steps to implement an AIS.
- Describe the process for determining if the new AIS meets post-implementation objectives.

### Acquiring an AIS

By the end of this activity, you should be able to compare the strengths and limitations of the following:

- purchasing an AIS
- developing an AIS in-house
- outsourcing an AIS

Read the following section in *Accounting Information Systems*:

- [Chapter 21 \("Introduction"\) pages 622-631](#)

Please view the following PowerPoint presentation:

- [Chapter 21 self-paced presentation](#)



Take the following quiz (you can skip questions 8-10):

- [Chapter 21 Quiz on pages 637-638](#)
  - After completing the quiz, you can check your answers on pages 646-648.

## **AIS Design and Evaluation**

By the end of this activity, you should be able to describe:

- the benefits of having a well-designed AIS
- the basic steps for implementing an AIS
- the post-implementation review process

Skim the following section in *Accounting Information Systems* (it is not necessary to study this section deeply as long as you are familiar with the terms listed above):

- [Chapter 22 \("Systems Design, Implementation, and Operation"\) pages 650-664](#)

Please view the following PowerPoint presentation:

- [Chapter 22 self-paced presentation](#)

## **Auditing Information Systems**

The final section in this course examines information systems for auditing.

### **Auditing Information Systems**

In this section, you will review the auditing process, describe objectives for an information system audit, and describe software that is commonly used for auditing.

This topic addresses the following competencies:

- **Competency 3025.1.8: Information System Auditing**  
The graduate explains how information systems are used in auditing.

This topic highlights the following objectives:

- Explain the auditing process.
- Describe the objectives of an information system audit.
- Describe software that may be used for auditing.

### **Information System Audits**

By the end of this activity, you should be able to describe:

- the objectives of an information system audit (page 315)



Skim the following section in *Accounting Information Systems* (it is not necessary to study this section deeply as long as you are familiar with the terms listed above):

- [Chapter 11 \(“Auditing Computer-Based Information Systems”\)](#)

Please view the following PowerPoint presentation:

- [Chapter 11 self-paced presentation](#)

## **Final Steps**

Congratulations on completing the activities in this course! You are now prepared to complete the associated assessment. If you have not already been directed to complete it, schedule and complete the assessment now.