



monarch

Curriculum Catalog

Career and Technical Education Series

Introduction to Information Technology

Support and Services

Table of Contents

INTRODUCTION TO INFORMATION TECHNOLOGY SUPPORT AND SERVICES COURSE OVERVIEW	1
UNIT 1: SYSTEM DESIGN AND IMPLEMENTATION	1
UNIT 2: SYSTEM MAINTENANCE.....	1
UNIT 3: END-USER SUPPORT.....	2
UNIT 4: MANAGEMENT COLLABORATION AND REPORTING	2
UNIT 5: CONTINUING EDUCATION AND CAREER OPPORTUNITIES	2
UNIT 6: COURSE REVIEW, AND EXAM.....	2

Introduction to Information Technology Support and Services Course Overview

This course focuses on real-world application including common industry best practices and specific vendors that offer tools for technicians, project managers, and IT leadership. Emphasis should be made that the purpose of the IT department of an enterprise is to support the overall mission of the company, and it is not simply a standalone component of the company’s infrastructure. Students will continue to apply their knowledge of hardware and software components associated with IT systems while exploring a variety of careers related to IT support and services. Students will analyze technical support needs to perform customer service, perform configuration management activities, and evaluate application software packages and emerging software. Students will demonstrate and apply knowledge of IT analysis and design by initiating a system project and evaluating applications within the IT system. Information Technology is a dynamic discipline that is continuously evolving.

Objectives

- Explore systems design and implementation.
- Investigate the implementation and maintenance of IT infrastructure.
- Review the basics of management collaboration and reporting.
- Discuss education and careers in IT and how to pursue such a career.

This is an introductory course in support and services providing information technology services and management. There are no requirements other than a basic familiarity with personal computers and the Internet. Students should be able to access the web and to use it to retrieve information and create accounts on free services.

Unit 1: System Design and Implementation	
Intro. to Information Technology Support and Services	Assignments
	1. Course Overview
	2. Supporting the Business Workflow Model
	3. Project: Understanding Software Development Models
	4. Operating Systems, Hardware, and Software Selection
	5. Project: Building a Mind Map
	6. Implementation and End-User Training
	7. Project: Preparing a Support Plan
	8. Quiz 1: On-Premise Systems
	9. Public Clouds
	10. Project: Moving to the Cloud
	11. Private Clouds
	12. Hybrid Clouds
	13. Project: Companies in the Hybrid Cloud
	14. Quiz 2: Cloud-Based Systems
	15. Special Project*
	16. Unit 1 Test
	17. Course Project Part 1: Creating an IT Service and Support Project from Scratch*
18. Glossary and Credits	

Unit 2: System Maintenance	
Intro. to Information Technology Support and Services	Assignments
	1. Anti-malware
	2. Patch Management
	3. Project: Patch Management Project
	4. Network Vulnerabilities
	5. Project: Hackers
	6. Quiz 1: Security
	7. Hardware and Software Redundancy-1
	8. Hardware and Software Redundancy-2
	9. Project: Disaster!
	10. Hardware and Software Redundancy-3
	11. Project: Selecting Storage Area Networking Products
	12. Quiz 2: Disaster Recovery
	13. Special Project*
	14. Unit 2 Test
	15. Course Project Part 2: Specifying Software*
16. Glossary and Credits	

Intro. to Information Technology Support and Services	Unit 3: End-User Support	
	Assignments	
	1. Types of Help Desk Systems and Support	10. Building a Knowledge Base
	2. Project: Training for a Service Desk	11. Project: Creating a Knowledge Management Site
	3. Resolution Methodologies for Help Desks	12. Quiz 2: Ticketing System / Knowledge Base
	4. Project: Branding and Customer Service	13. Special Project*
	5. Customer Service	14. Unit 3 Test
	6. Quiz 1: Helpdesk	15. Course Project 3: How, How Much, and When?*
	7. Ticketing Systems	16. Glossary and Credits
	8. Protocols and Procedures	
	9. Project: From Plato to Technical Support, a Paper on Problem Solving in History	

Intro. to Information Technology Support and Services	Unit 4: Management Collaboration and Reporting	
	Assignments	
	1. Working with the Management Team	10. Project Management Applications
	2. Project: Role-playing Senior Management Meeting	11. Project: Creating a Project in Open Project
	3. Departmental Reporting	12. Quiz 2: Leading Technology Projects
	4. Project: Role-playing with Departmental Reports	13. Special Project*
	5. Emerging Technologies	14. Unit 4 Test
	6. Quiz 1: Management Collaboration and Reporting	15. Course Project Part 4: Management Collaboration and Reporting*
	7. Creating and Managing an IT Project	16. Glossary and Credits
	8. Project: Create a Feasibility Study	
	9. Managing IT Projects	

Intro. to Information Technology Support and Services	Unit 5: Continuing Education and Career Opportunities	
	Assignments	
	1. Pursuing Technical Education	9. Off-Premise (Outsource) IT Support
	2. Technical Education Degree Programs	10. Consultant/Educator
	3. Project: Take a Free Course in Computing	11. Project: Imagining a Consulting Practice
	4. On-the-Job Training	12. Quiz 2: Emerging Trends
	5. Project: Developing a Personal Syllabus	13. Special Project*
	6. Quiz 1: Continuing Education	14. Unit 5 Test
	7. On-Premise (Insource) IT Support	15. Course Project Part 5: Presenting your plan*
	8. Project: Understanding Job Requirements and Certifications	16. Glossary and Credits

ITSS	Unit 6: Course Review, and Exam	
	Assignments	
	1. Course Project Part 6: Describing What You Learned*	2. Review
		3. Exam

(*) Indicates alternative assignment