

CURRICULUM OVERVIEW

Introduction to Information Technology Support and Services

Career and Technical Education Series



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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. It should be emphasized 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 and 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 to providing information technology services. 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.

IT Support and Services Capstone

This capstone project provides students the opportunity to use their newfound understanding of IT Support and Services to create a full IT plan for a new business within an existing corporation. This course will enable the student to consider all high-level aspects of providing IT support and services through the lens of a new business unit "starting from scratch." The student will—with the background of the previous units—create the project plan, identify the key steps, research and recommend products and architectures, design processes and procedures, and otherwise create a credible plan that would be useful when applying for positions in IT support and services. One of the key barriers in finding work in IT is perceived aptitude and prior experience. Unit Six will help the student to comprise some evidence for his or her further study or employment.

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

Intro. to Information Technology Support and Services	Unit 2: System Maintenance	
	Assignments	
	1. Anti-malware	10. Hardware and Software Redundancy-3
	2. Patch Management	11. Project: Selecting Storage Area Networking Products
	3. Project: Patch Management Project	12. Quiz 2: Disaster Recovery
	4. Network Vulnerabilities	13. Project: Special Project*
	5. Project: Hackers	14. Unit 2 Test
	6. Quiz 1: Security	15. Course Project Part 2: Specifying Software*
	7. Hardware and Software Redundancy-1	16. Glossary and Credits
	8. Hardware and Software Redundancy-2	
	9. Project: Disaster!	
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. Project: 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-Source Project Management Software
	3. Departmental Reporting	12. Quiz 2: Leading Technology Projects
	4. Project: Role-playing with Departmental Reports	13. Project: 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. Outsourced 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. Project: Special Project*
	6. Quiz 1: Continuing Education	14. Unit 5 Test
	7. Insourced IT Support	15. Course Project Part 5: Presenting your plan*
	8. Project: Understanding Job Requirements and Certifications	16. Glossary and Credits

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

(*) Indicates alternative assignment