

# COMPUTER TECHNOLOGY SKILLS (CTS)

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## CTS 1142 Information Technology Project Management

**Credit Hours:** 3

**Prerequisites:** CGS 2100 with a grade of "C" or higher

**Lab Fee:** Yes

This introductory course teaches the essentials of Information Technology Project Management. The course covers the basic aspects of project management and emphasizes the important special considerations which apply to information technology projects. Major topics include general principles, processes, and practices of information technology project management, techniques for planning, organizing, scheduling, and controlling software and infrastructure projects with focus on cost estimation and risk management.

## CTS 1154 Help Desk Technical Support

**Credit Hours:** 3

**Prerequisites:** CGS 2100 with a grade of "C" or higher

**Lab Fee:** Yes

This course provides students with a broad-based knowledge of Service Desk technologies, tools and techniques that will prepare students to implement and support enterprise support operations within an organization.

## CTS 1155 Help Desk Customer Support

**Credit Hours:** 3

**Prerequisites:** CGS 2100 with a grade of "C" or higher

**Lab Fee:** Yes

This course provides students with a broad-based knowledge of customer service support skills and techniques that will prepare students to implement and support enterprise support operations within an organization.

## CTS 1321 Linux Networking and System Administration

**Credit Hours:** 3

**Prerequisites:** CGS 1000 with a grade of "C" or higher

**Lab Fee:** Yes

This is an introductory hands-on course teaching the essentials of Linux networking and system administration. Topics include installation techniques, using Bourne and Bash command line shells, configuring Linux network servers/clients, local area networks (LANs), Linux scripting basics, configuring Linux networking security tools, and using Linux system administration and networking commands and utilities.

## CTS 1329 Microsoft Client O/S

**Credit Hours:** 3

**Lab Fee:** Yes

This course introduces the student to the current Microsoft client operating system (O/S) within a network environment. Topics include operating system installation, configuration, administration, troubleshooting, device configuration, security and access control, network connectivity and system performance optimization.

## CTS 1383 Microsoft Server O/S - Installation and Configuration

**Credit Hours:** 3

**Prerequisites:** CTS 1329 with a grade of "C" or higher

**Lab Fee:** Yes

This course provides an introduction to the core concepts of the current Microsoft server operating system (O/S) and lays the foundation for more advanced concepts and courses. Topics covered include installation, user and group accounts, authentication, an introduction to Active Directory, Server Manager Console, server software, security and policy management using Network Access Protection, automated and remote administration, basic network connectivity, and backup and recovery.

## CTS 2370 Virtual Infrastructure- Planning and Design

**Credit Hours:** 3

**Prerequisites:** CTS 1383 with a grade of "C" or higher

**Lab Fee:** Yes

This course introduces the student to the concepts and capabilities of virtual architecture with a focus on the installation, configuration, and management of virtual infrastructures. This course covers fundamentals of virtual network design and implementation, fundamentals of storage area networks, virtual switching, and virtual system management.

## CTS 2371 Virtual Computing- Deployment, Security, and Analysis (VMware)

**Credit Hours:** 3

**Prerequisites:** CTS 2370 with a grade of "C" or higher

**Lab Fee:** Yes

This hands-on training course explores installation, configuration, and management of VMWare vSphere®, which consists of VMWare vSphere® ESXi™ and VMWare® vCenter Server™. This course is based on current versions of ESXi, vCenter, and vSphere Server.

## CTS 2384 Directory Services

**Credit Hours:** 3

**Prerequisites:** CTSC 1134 and CTS 1383- both courses with a grade of "C" or higher

**Lab Fee:** Yes

This course teaches the concepts of utilizing directory services from the major operating systems used in all business sectors. Students learn to install, configure, administrate, maintain, integrate and troubleshoot hosted directory services utilizing the current industry recognized operating systems from Microsoft, Apple, and Linux. This course includes theory and hands-on lab exercises to develop the students knowledge of the subject material.

## CTS 2411 Information Storage Management

**Credit Hours:** 3

**Prerequisites:** CTS 1383 with a grade of "C" or higher

**Lab Fee:** Yes

This course introduces students to the concepts of managing advanced storage systems, protocols, and architectures, including Storage Area Networks (SAN), Network-Attached Storage (NAS), Fibre Channel Networks, Internet Protocol SANs (IPSAN), Internet Small Computer Serial Interface (iSCSI), and Content-Addressable Storage (CAS).

**CTS 2440 Introduction to Oracle SQL and PL/SQL**

**Credit Hours:** 3

**Prerequisites:** COP 2334 and COP 2700 - all courses with a grade of "C" or higher

**Lab Fee:** Yes

This course is an introduction to database technology using the Oracle database. The course covers relational database concepts and the Oracle structured query language (SQL) Developer tool. A strong SQL focus is emphasized. The student will use the SQL Plus environment for executing individual SQL statements and SQL scripts. The student will be introduced to many Oracle specific SQL statements. The student will be introduced to procedural (PL)/SQL programming language fundamentals. The course prepares students for the Oracle Application Developer and Oracle Database Administrator exams. In addition, secure application development concepts are reviewed.

**CTS 2441 Oracle Database Fundamentals 1**

**Credit Hours:** 3

**Prerequisites:** CTS 2440 with a grade of "C" or higher or consent of instructor

**Lab Fee:** Yes

This course provides the basic knowledge required to perform the most common database administration tasks. These tasks include managing user accounts, managing database instances, managing all database resources, configuring networking features, developing database backup and recovery strategies and policies, and basic performance tuning. The student will learn to perform backup and recovery using two strategies (user-managed backup and recovery, and Recovery Manager [RMAN]). The student will learn to use the Oracle Net Services and other networking utilities to maintain connectivity in an Oracle database environment. The course prepares students for the Oracle Database Administrator exam. Students with SQL experience may co-register for CTS 2440 and CTS 2441 with consent of instructor.