

INFO TECH & INFO SYSTEMS (ITIS)

ITIS 099

Introduction to Microsoft Windows

2 Units

18 lecture hours, 36 lab hours

Equivalent to: CIS 099, CSIS 099, CSIS 105

Grade Mode: Pass/No Pass, Standard Letter

Strongly recommended: ENGL 101.

This is a beginning-level course on Windows OS which introduces the student to the terminology, application, and use of the Windows operating system. Topics include file management, hardware and software maintenance, working with administrative tools, Internet access and communication, and others. The course is designed for students with no previous computer experience.

ITIS 104

Information Technology

4 Units (AA/AS; CSU)

54 lecture hours, 54 lab hours

Equivalent to: ENGR 104, IT 104

Grade Mode: Standard Letter

Strongly recommended: ENGL 101.

This course is designed in building computer hardware and software skills needed for entry-level IT positions. Topics covered include networking and computer security. This course will be of interest to computer technicians, field service and help desk support personnel, as well as, individuals interested in enhancing their technical skills and knowledge of the PC system. It will lay the foundation for the CompTIA A+ certification exams.

ITIS 107

Network Technology

4 Units (AA/AS)

54 lecture hours, 54 lab hours

Equivalent to: ENGR 107, IT 107

Grade Mode: Pass/No Pass, Standard Letter

Strongly recommended: ITIS 104; ENGL 101.

This course provides information covering the LAN and WAN. Network topologies and protocols are presented.

ITIS 108

Network Operating Systems

4 Units (AA/AS)

54 lecture hours, 54 lab hours

Equivalent to: ENGR 108, IT 108

Grade Mode: Pass/No Pass, Standard Letter

Strongly recommended: ITIS 107.

This course provides information covering the areas of network operating systems used on local and wide area networks (LANS and WANS), as well as popular server software.

ITIS 109

Network and Computer Security

4 Units (AA/AS)

54 lecture hours, 54 lab hours

Equivalent to: CSIS 109, IT 109

Grade Mode: Pass/No Pass, Standard Letter

Strongly recommended: ENGL 101.

Covers basics of general security concepts, network security, communication security, infrastructure security. Business continuity, disaster recovery, planning and prevention will be covered. This course will lay the foundation for attendees to complete the Comp TIA Security+ certification tests.

ITIS 112

Microsoft Desktop Support

3 Units (AA/AS)

54 lecture hours, 18 lab hours

Grade Mode: Pass/No Pass, Standard Letter

Strongly recommended: ITIS 104; ENGL 101.

This course provides students with the knowledge and skills needed to install, configure, and administer the Microsoft Windows Operating System environment. Students will get practical experience to prepare them for the MCSA Exam on installing and configuring Windows OS.

ITIS 115

Computer Information Systems

3.5 Units (AA/AS; CSU)

54 lecture hours, 27 lab hours

Equivalent to: CIS 107, CSIS 107

Grade Mode: Pass/No Pass, Standard Letter

Strongly recommended: ITIS 099; ENGL 101.

This course is an overview of information technology and its role in business, industry, health care, and government. Topics include computer hardware, end-user software, network/Internet technologies, ethics, emerging technologies, and coding.

ITIS 119

Web Design Using HTML

3 Units (AA/AS; CSU)

54 lecture hours, 18 lab hours

Equivalent to: CIS 119, CSIS 119

Grade Mode: Pass/No Pass, Standard Letter

Strongly recommended: ITIS 115; ENGL 101.

This course provides students with the skills needed to create web pages using the latest version of HTML. Students will also be introduced to CSS modeling and JavaScript to create custom web pages for personal and professional environments. The laboratory component provides the student with expanded first-hand experience in specific areas of course content.

ITIS 120

Cybersecurity: Ethical Hacking

3 Units (AA/AS; CSU)

36 lecture hours, 54 lab hours

Grade Mode: Pass/No Pass, Standard Letter

Strongly recommended: ITIS 107 and ITIS 109.

This course provides an overview of information systems security, specifically system penetration. Students will be introduced to the concepts, principles, and techniques for attacking and disabling a network within the context of properly securing it. General concepts covered include aspects of computer and cyber crime, cyber crime investigation, security policies, sample attacks, and testing. Students will receive hands-on training using various tools for penetration testing.

ITIS 130**Microcomputer Applications I****4 Units (AA/AS; CSU; UC)****72 lecture hours****Equivalent to: CIS 130, CSIS 130****Grade Mode: Pass/No Pass, Standard Letter***Strongly recommended: ITIS 099, ENGL 101.*

Students will use the personal computer to learn an office suite, such as Microsoft Office, that includes word processing, electronic spreadsheets, database management systems, multimedia/presentation graphics, personal information management and an introduction to the Windows OS. This course prepares the student to take the Microsoft Office User Specialist certification exam.

ITIS 141**Programming Fundamentals****3 Units (AA/AS; CSU)****36 lecture hours, 54 lab hours****Equivalent to: CIS 141, CSIS 141****Grade Mode: Standard Letter***Strongly recommended: ITIS 115.*

This course is an introduction to programming concepts using the JavaScript language. Emphasis is placed on good design techniques, coding, and documentation. Topics covered focus on variables, data types, operators, functions, decision making with control structure and statements, objects, events, iteration, forms, and error handling. This course is not for Computer Science majors.

ITIS 150**Web Design with Dreamweaver****3 Units (AA/AS)****54 lecture hours, 18 lab hours****Equivalent to: CIS 150, CSIS 150****Grade Mode: Pass/No Pass, Standard Letter***Strongly recommended: ITIS 099; ENGL 101.*

Fundamentals of web design using a proprietary web development tool. Introduces the basic features of Adobe Dreamweaver including the Dreamweaver interface, toolbars, and panels. Topics include: adding and editing text, formatting using Cascading Style Sheets, editing HTML, adding images, tables, forms, and responsive web design.

ITIS 160**Introduction to Database Concepts****3 Units (AA/AS)****54 lecture hours****Equivalent to: CSIS 175****Grade Mode: Pass/No Pass, Standard Letter***Strongly recommended: ENGL 101.*

This beginning course on database design focuses on the skills needed to define, create, and maintain a fully programmed database system using Microsoft Access in a Windows environment. The course covers database concepts, design, tables, queries, reports, and menus.

ITIS 165**Database Principles Using SQL****3 Units (AA/AS; CSU; UC)****54 lecture hours****Grade Mode: Standard Letter**

This is an introductory course in SQL (Standard Query Language). Concepts covered include a general overview of SQL and MySQL, creating a MySQL database, tables, queries, subqueries, filtering, and conditional logic.

ITIS 168**Designing Web Sites****3 Units (AA/AS)****45 lecture hours, 27 lab hours****Equivalent to: CIS 168, CSIS 168****Grade Mode: Pass/No Pass, Standard Letter***Strongly recommended: ITIS 099; ENGL 101.*

An introduction to using Web design software to plan, create, and maintain a Web site. This course explores other popular web design software programs such as MS Expression Web and WordPress. Topics covered include: the program interface, using images, links, tables, forms, and style sheets.

ITIS 170**Database Programming****3 Units (AA/AS; CSU)****54 lecture hours****Equivalent to: CSIS 176****Grade Mode: Pass/No Pass, Standard Letter***Prerequisite(s): ITIS 160.**Strongly recommended: ENGL 101.*

This course introduces database programming using Visual Basic for Applications (VBA). Concepts covered include the VBA interface, VBA concepts, analysis of data management requirements, and design of a database to meet those needs.

ITIS 180A**Introduction to Cloud Computing****3 Units (AA/AS)****54 lecture hours****Grade Mode: Standard Letter***Strongly recommended: ENGL 101.*

This course introduces cloud computing which shifts information systems from on-premises computing infrastructure to highly scalable internet architectures. The course provides a solid foundation of cloud computing technologies and provides students with the understanding required to effectively evaluate and assess the business and technical benefits of cloud computing and cloud applications. Students analyze a variety of cloud services (storage, servers and software applications) and cloud providers. Case studies will be used to examine various industry cloud practices and applications. The course also surveys cloud careers and discusses industry demand for cloud skills.

ITIS 180B**Database Essentials in Amazon Web Services****3 Units (AA/AS)****54 lecture hours****Grade Mode: Standard Letter***Prerequisite(s): ITIS 180A.**Strongly recommended: ENGL 101.*

This course addresses cloud database management which supports a number of different approaches for storing data. In the course, students define, operate and scale both SQL and no SQL data storage solutions. This course considers factors that should be balanced during the design of a storage solution. Principles are applied by performing exercises using Amazon RDS and SQL to create and fill tables, retrieve and manipulate data. Object-based APIs are used to serialize objects to Amazon DynamoDB for no SQL solutions. Topics include automated backups, transaction logs, restoration and retention.

ITIS 180C**Compute Engines in Amazon Web Services****3 Units (AA/AS)****54 lecture hours****Grade Mode: Standard Letter***Prerequisite(s): ITIS 180A; CS 140 or CS 112.*

In this course, students explore how cloud computing systems are built using a common set of core technologies, algorithms, and design principles centered around distributed systems. Students will use the Amazon Web Services (AWS) Management Console to provision, load-balance and scale their applications using the Elastic Compute Cloud(EC2) and the AWS Elastic Beanstalk. The course discusses, from a developer perspective, the most important reasons for using AWS and examines the underlying design principles of scalable cloud applications.

ITIS 180D**Security in Amazon Web Services****3 Units (AA/AS)****54 lecture hours****Grade Mode: Standard Letter***Prerequisite(s): ITIS 180A.**Strongly recommended: ITIS 109, ENGL 101.*

This course focuses on protecting the confidentiality, integrity and availability of computing systems and data. Students learn how Amazon Web Service (AWS) uses redundant and layered controls, continuous validation and testing, and a substantial amount of automation to ensure the underlying infrastructure is continuously monitored and protected. Students examine the AWS Shared Responsibility Model and access the AWS Management Console to learn more about security tools and features provided by the AWS platform.

ITIS 698B**Cooperative Education****2 Units (AA/AS)****120 lab hours arranged****Equivalent to: IT 698B****Grade Mode: Pass/No Pass, Standard Letter***Prerequisite(s): The student must be simultaneously enrolled in a class that relates to the Cooperative Education class.*

A course designed to assist students in planning and accomplishing meaningful learning objectives related to Information Technology at their place of volunteer employment or training sites.

ITIS 698D**Cooperative Education****4 Units (AA/AS)****240 lab hours arranged****Equivalent to: IT 698D****Grade Mode: Pass/No Pass, Standard Letter***Prerequisite(s): The student must be simultaneously enrolled in a class that relates to the Cooperative Education class.*

A course designed to assist students in planning and accomplishing meaningful learning objectives related to Information Technology at their place of volunteer employment or training sites.

ITIS 699B**Cooperative Education****2 Units (AA/AS)****150 lab hours arranged****Equivalent to: IT 699B****Grade Mode: Pass/No Pass, Standard Letter***Prerequisite(s): The student must be simultaneously enrolled in a class that relates to the Cooperative Education class.*

A course designed to assist students in planning and accomplishing meaningful learning objectives related to Information Technology at their place of paid employment or training sites.

ITIS 699D**Cooperative Education****4 Units (AA/AS)****300 lab hours arranged****Equivalent to: IT 699D****Grade Mode: Pass/No Pass, Standard Letter***Prerequisite(s): The student must be simultaneously enrolled in a class that relates to the Cooperative Education class.*

A course designed to assist students in planning and accomplishing meaningful learning objectives related to Information Technology at their place of paid employment or training sites.