The Information and Communication Technologies & Digital Media
Sector Navigation Team
CALIFORNIA COMMUNITY COLLEGES

IT Technician Pathways Course Guide

Stage	Course Name or Topic	Related 3rd Party Certifications	C-ID IT-MC C-ID	Course Description	NetLab LABs available	College Course Title and Course Number
Computer Retail Sales and Support	**Introduction to Retail or Business Fundamentals**		BUS 100	Generic Retail Management, Retail Sales Business Concepts		
	Customer Service/Human Relations			This course provides students with basic knowledge of customer service by examining customer service from the provider's and customer's perspectives. It takes a pragmatic approach to applying the principles of service within an organization. Topics include leadership in customer service, customer retention and satisfaction, classifications of service organizations, and principles and practices of internal service. This course introduces students to human behavior as it relates to business. Topics include leadership, communication, status, decision making, motivation, and personnel problems.		
	Business Communication		BUS 115	This course applies the principles of ethical and effective communication to the creation of letters, memos, emails, and written and oral reports for a variety of business situations. The course emphasizes planning, organizing, composing, and revising business documents using word processing software for written documents and presentation-graphics software to create and deliver professional-level oral reports. This course is designed for students who already have college-level writing skills.		
	Microsoft Office Essentials			Overview: This course is designed for students interested in an overview and basic working knowledge of Microsoft Office Professional suite for personal and/or professional purposes. Emphasis is placed on MS Word, Excel, Access, Power Point and Outlook, and the integration of data within and between the programs		

	Information & Communications Technology Essentials	CompTIA A+	ITIS 110	This course provides an introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level ICT professionals. The fundamentals of computer hardware and software as well as advanced concepts such as security, networking, and the responsibilities of an ICT professional will be introduced. Preparation for the CompTIA A+ certification exams.	Yes	
	Business Information Systems, Computer Information Systems		ITIS 120	Examination of information systems and their role in business. Focus on information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware and software components. Application of these concepts and methods through hands-on projects developing computer-based solutions to business problems. This course will provide students with business case studies and the application of technology solutions to solve the problems. The course provides students with basic database and spreadsheets knowledge and skills.		
Help Desk User Support	**Computer Network Fundamentals**	CompTIA Network+	ITIS 150	This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP (Internet Protocol) addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for further study of computer networks. It uses the OSI (Open Systems Interconnection) and TCP (Transmission Control Protocol) layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. Preparation for the CompTIA Network+ certification exam.	Yes	
	Systems and Network Administration (Network Operating Systems)	MCSA Server 2012	ITIS 155	This course will provide a student with the knowledge and skills required to build, maintain, troubleshoot and support server hardware and software technologies. The student will be able to identify environmental issues; understand and comply with disaster recovery and physical / software security procedures; become familiar with industry terminology and concepts; understand server roles / specializations and interaction within the overall computing environment.	Yes	
	Installing, Configuring and Administering a Microsoft OS (Desktop Support Technician I)	**MCTS:Win 7** Microsoft Certified Technology Specialist:Win 7 Config)		This course will provide students with the knowledge and skills to install and configure Windows desktops and to configure mobile computers and applications that run on Windows in a network environment. Course content follows the Microsoft Official Academic Course curriculum and is intended to prepare students to take the Microsoft Client component of the Microsoft Certified IT Professional (MCITP) and Microsoft	Possible	

				Certified Technology Specialist (MCTS) certification exam.	Yes	
	Introduction to Information Security Systems (Security+ Certification Training)	CompTIA Security+	ITIS 160	An introduction to the fundamental principles and topics of Information Technology Security and Risk Management at the organizational level. It addresses hardware, software, processes, communications, applications, and policies and procedures with respect to organizational Cybersecurity and Risk Management.	Yes	
IT Technician	**Routing & Switching Essentials**	Cisco CCENT	ITIS 151	This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure routing and a switching for basic and secure functionality. By the end of this course students will be able to configure, secure, and troubleshoot routers and switches and resolve common issues with routing protocols, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.	Yes	
	Installing, Configuring and Administering Linux Operating System (Linux +)	CompTIA Linux+		This is a project-oriented course that provides students with the knowledge and skills to work as a junior level Linux administrator. This course follows the official Computing Technology Industry Association (CompTIA) curriculum and is intended to prepare students to take the Linux+ exam.	Yes	
	Certified Ethical Hacker (cybersecurity)	CEH by E.C	ITIS 164	This course introduces students, who have completed the Introduction to Information Security Systems course, to the various methodologies for attacking a network. Students will be introduced to the concepts, principles, and techniques, supplemented by hands-on exercises, for attacking and disabling a network within the context of properly securing a network. The course will emphasize network attack methodologies with the emphasis on student use of network attack techniques and tools and appropriate defenses and countermeasures. Students will experience a hands-on practical approach to penetration testing measures and ethical hacking.	Yes	

Further Specialization Options	Mobility and Mobile Design	CompTIA Mobility+		This course will introduce the student to the knowledge and skills required to understand and research capabilities of mobile devices and features of over-the-air technologies. Students will learn to deploy, integrate, support and manage a mobile environment ensuring proper security measures are implemented for devices and platforms while maintaining usability.		
	Preparation for CCNA	Cisco CCNA		Students can build upon their entry-level networking skills by taking an additional course(s) that will help them prepare for various Cisco certifications including CCNA-Routing and Switching, CCNA-Security, CCNA-Collaboration, and CCNP.	Yes	
	Cloud Essentials	CompTIA Cloud+		The course covers cloud computing topics including: Characteristics of cloud services from a business perspective, business value of cloud computing, technical perspective/cloud types, steps to successful adoption, impact and changes on IT service management, risks and consequences and prepares students to take CompTIA's Cloud Essentials exam (Exam CLO-001)	Yes	
	Project Management or Process Improvement	CompTIA Project+		Bringing it all together, the student is encouraged to select either: a Project Management Overview, workflow analysis, or a quality process improvement and innovation class		