

# Certificate of Achievement in Information Technology Technician II (ITTP II)

## Item 1. Program Goals and Objectives

The goal of the Information Technology Technician (**ITTP II**) Help Desk User Support Certificate of Achievement is to prepare students for jobs as computer and networking technical support. Skills will be taught in areas of: Fundamentals of Networking such as OSI model, TCP/IP Protocol Suite, wired and wireless networking, Windows Server Network Operating System, Security and Risk Management. Students are led towards and encouraged to take CompTIA Network+, MCSA 70-140, CompTIA Security+, MCSA 70-698 Certification.

## Item 2. Catalog Description

This certificate of achievement based on ICT-Digital Media Sector of the *Doing What Matters Program* - IT Technician Pathway (**ITTP**), which consists of three stages (**ITTP I - III**). This certificate of achievement is the second step in pursuing a career in Information and Technology field as an IT Technician. This certificate will help students launch a career in IT by starting with Help Desk User Support jobs, and building relevant skills and certifications over time. The entire pathway represents IT skill sets in today's demand by businesses. It is a program describing an effective balance of training, certifications and experience to develop IT Professionals without a 4-year degree. Visit <http://ict-dm.net/ittp> for more information about this pathway. Students are led towards and encouraged to take CompTIA Network+, MCSA 70-140, CompTIA Security+, MCSA 70-698 Certification.

## Item 3. Program Requirements

**ITTP II** curriculum is part of a planned career pathway sequence. To complete the **ITTP II** Certificate of Achievement, students must complete all of the core course requirements. Upon completion students become eligible to enroll in additional **ITTP III** upskill courses or work experience in the career pathway sequence. It is recommended that students consult with a College Counselor to discuss a short-term employment goal, designate a career pathway, identify industry certifications, and complete their educational plan.

Program Start Semester and Year: Fall 2018			
Courses Required for the Certificate of Achievement:			
Dept. Name / #	Course Description	Units	Sequence
CO INFO 014	Introduction to Computer Communications	3	Yr. 2, Fall
CO INFO 009	Network System Manager	3-6	Yr. 2, Fall
CO INFO 003	Operating Systems	3	Yr. 2, Fall

CO INFO 052	Introduction to Computer and Information Security	3	Yr. 2, Spring
	TOTAL:	12-15	

#### **Item 4. Master Planning**

This certificate is designed to align learning content to the “Information Technology Technician” pathway developed by the Information and Communication Technology – Digital Media Sector Navigation Team, as a component of the “*Doing What Matters*” program. A key component of this effort is the development of a Certificate that mirrors this pathway, resulting in the development of a designation identifying uniform collection of skill business and industry have recognized as needed by entry level workers.

The primary goal of this proposed program is to update, revamp and bring up to date Computer Information Systems curricula and course offerings. As a result, it is expected to increase in college student enrollment majoring in Computer Information Systems, Computer Science and Information Technology, and Computer Science subjects in general.

#### **Item 5. Enrollment and Completer Projections**

No particular enrollment and Completer Projections data are available yet, but included career options and Labor Statistics should provide some idea.

**Career Options:** This certificate prepares the student for a wide variety of computer support related occupations throughout all industries in California. Occupational list includes:

- Computer Network Support Specialists
- Computer User Support Specialist
- Information and Records Clerk, All Other
- Information Security Analysts
- Network and Computer Systems Administrators
- Office and Administrative Support Workers, All Other
- Office Clerks, General
- Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products
- Computer Network Architects
- Computer Occupations, All Other

**Labor Statistics:**

<b>TEN YEAR FORECAST FOR CALIFORNIA</b>				
<b>Occupation</b>	<b>2014</b>	<b>2024</b>	<b>Change</b>	<b>Change %</b>
Computer Network Support Specialists	19700	23600	3900	19.8
Computer User Support Specialists	62200	77500	15300	24.6
Information and Record Clerks, All Other	21400	23300	1900	8.9
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	46900	53800	6900	14.7
Office Clerks, General	331200	363500	32300	9.8
Information Security Analysts	8000	10100	2100	26.3
Network and Computer Systems Administrators	43100	52000	8900	20.6
Computer, Automated Teller, and Office Machine Repairers	12800	13300	500	3.9
Computer Systems Analysts	75500	102200	26700	35.4
Computer Network Architects	14200	17900	3700	26.1
Computer Occupations, All Other	25000	30000	5000	20

**Item 6. Place of Program in Curriculum/Similar Programs**

- a) Do any active inventory records need to be made inactive or changed in connection with the approval of the proposed program? If yes, please specify.
  - a) No courses need to be made inactive.
- b) Does the program replace any existing program(s) on the college's inventory? Provide relevant details if this program is related to the termination or scaling down of another program(s).
  - a) This proposal does not replace any existing programs.
- c) What related programs are offered by the college?
  - a) Associate in Science Degree in Computer Information Systems.

**Item 7. Similar Programs at Other Colleges in Service Area**

*Similar program being offered at some LACCD Participating Campuses:*

Los Angeles Mission College

East Los Angeles College

West Los Angeles College

**Program Learning Objectives:**

Upon completion of this Certificate of Achievement, the student will be able to:

1. Utilize knowledge of networking foundation in structuring and building LAN, WAN, WLAN. Use knowledge of OSI model, Network Components, Ethernet technologies, IPv4 and IPv6 protocol suite in building networks. Perform sub-netting, routing, management, security and troubleshooting of networks.
2. Perform installation of Windows 2012 R2 Server OS. Utilize knowledge of various roles and futures that come with Windows server. Perform installations and configurations of Active Directory, DNS, DHCP, Virtualization, User, group and security management with various policy development tools and methods.
3. Perform system installations and utilize Windows Desktop Operating systems. With deep and solid background in the futures offered by Windows Desktop OS build secure systems, manage file and folder permissions, auditing, encryption and malicious attack prevention.
4. Utilize full range of security concepts and technics in relation to network vulnerabilities, cryptographic and public key infrastructure, access control, policy, and network and communication security.

Signature:

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Chair, College Curriculum Committee

Signature:

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President, Academic Senate

Signature:

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Vice President, Academic Affairs