

**IT Technician Pathway: Stage III
 IT Technician
 PREAPPROVED PROGRAM APPLICATION
 (Effective April 2016 through June 2017)**

This LAOCRC preapproval automatically endorses any LA/OC college to develop a new IT Technician pathway (ITTP) program, or substantially change an existing program to align with the statewide Information Communication Technology/ Digital Media (ICT/DM) sector IT Technician pathway: Stage III. Such programs are granted automatic regional endorsement if they are approved and listed on the statewide ICT-DM ITTP website.

This application was developed in collaboration with Gustavo Chamorro, Deputy Sector Navigator, ICT and Digital Media and the LAOCRC regional ITTP program endorsement workgroup.

Instructions to colleges:

1. Ensure your college and courses are listed on the ICT/DM ITTP webpage. <http://ict-dm.net/ittp>
2. Do not file a letter of intent for your ITTP program.
3. Complete or modify all yellow highlighted sections of the preapproved application below.
4. Email completed preapproved application to innovatecte@gmail.com and laocrc@rscdd.edu
5. The LAOCRC staff will verify the college and courses are listed on the ICT/DM ITTP website and then email the voting member of the college a signature page for use when submitting to the CCCCCO. Your program will appear on the next LAOCRC program approval agenda as an information item. Statewide Advisory minutes are available on the LAOCRC website.

Fill In Form

CIS - IT Technician

Proposed Program Title

Winter 2018

Projected Program Start Date

Pasadena City College

College

Pasadena Area Community College District

District

Contact Information

Dr. Rocky Cifone

Voting Member

Dean, Business, Engineering & Technology

Title

626-585-7341

Phone Number

rxcifone@pasadena.edu

Email

Goal(s) of Program (Check all that apply):

- Career Technical Education (CTE) Transfer Other

Type of Program (Check all that apply):

- Certificate of Achievement 12-17 (or 17-27 quarter) units Certificate of Achievement 18+ semester (or 27+ quarter) units
 Associate of Science Degree Associate of Arts Degree

Reason for Approval Request (Check One):

- New Program Substantial Change Locally Approved

Program Information

0707.30 or 0708.00

Recommended [Taxonomy of Program \(TOP\) Code](#)

23

Units for Major-Degree

83

Total Units for Degree

65

Required Units-Certificate

Written Form

- Insert the description of the program as it will appear in your college catalog. The following is a catalog description used by the LAOCRC to preapprove the ITTP: Stage III pathway aligned certificate. Feel free to adopt this description, modify, or create your own. (See PCAH pp. 142 and 170 for requirements)**

The IT (Information Technology) Technician Certificate of Achievement is the third stage of the statewide IT Technician pathway and equips students with the advanced IT skills required of an IT Technician. As students complete coursework, they are encouraged to complete the aligned industry valued certifications such as CompTIA Linux+, Cisco Certified Entry Networking Technician (CCENT), and the Certified Ethical Hacker (CEH). Students who have completed Stage I and II of the IT Technician pathway along with this stage are prepared for positions such as Computer Systems Analysts, Information Security Analysts, Network and Computer Systems Administrators, and IT wholesale/retail supervisory positions.

[Pasadena City College Catalog Description:](#)

[The curriculum prepares students with necessary skills to seek employment in IT support in the field of Information Technology. Instruction includes training in installing, configuring, maintaining, and troubleshooting Cisco routers and switches; training in computer hardware, software, Microsoft Windows Server operating systems, Microsoft Windows client operating systems, and Linux operating systems in a networked environment with an emphasis on system and network security. A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.](#)

- Rationale for the regional programs.**

The IT Technician certificate of achievement program is the third stage of the statewide IT Technician Pathway (ITTP). This pathway was designed with faculty and industry involvement to prepare students for entry-level IT work in a short amount of time. The pathway often utilizes existing academic programs and courses, requiring minimal new course development or modification. Additionally, during this stage, students can potentially obtain up to three industry certifications, which gives them a competitive advantage in the industry. With the coursework in the previous two ITTP stages and some years of work experience, the courses in this stage of the pathway can advance a student's career as a computer systems or information security analyst or network and computer systems administrator. These advanced IT Technician occupations earn median wages between \$40.00 and \$50.00 per hour. The IT Technician certificate of achievement program represents a set of in-demand skills throughout the state, based upon interviews with placement agencies, and cross-referenced with advisory groups and other Labor Market Information.

- Labor Market Information (LMI) and employment outlook (including citation for the source of the data) for students exiting the program. A college may choose to use the LMI below, or use their own substantiated LMI**

description when applying with the CCCC (See PCAH pp. 85-88, 136, 147, 148, 165, 168, and 176)

Stage three of the IT Pathway and/or aligned Certificate of Achievement prepares completers for employment as Computer Systems Analysts (SOC 15-1121), Information Security Analysts (SOC 15-1122), Network and Computer Systems Administrators (SOC 15-1142), Sales Representatives, Services, All Other (SOC 41-3099), Sales Representatives, Wholesale and Manufacturing, Technical, and Scientific Products (SOC 41-4011), and Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (SOC 41-4012). In Los Angeles and Orange County, the net demand for these occupations, wage data, and overall industry outlook is substantial enough to warrant this regional preapproval for all 27 LAOCRC colleges to create and offer aligned certificates of achievement in Stage Three of the IT Pathway. Regionally, median hourly earnings across these six occupations is \$29.78/hr. and the 2013-2021 expected growth is 18,170 jobs (11.5%) with the three “sales” occupations predicting 75% of the overall growth across all six occupations. However, the largest median earnings exist in the three “computer” occupations. There were 4,356 related regional completions (many in non ICT related CIP Codes) across 21 programs for 8,500 regional openings in 2014 with Custom Computer Programming Services and Computer System Design Services being two of the top five industries employing these two occupations (8,102 occupation group jobs in the industry, 2015). Last, there were 54,970 total job postings for 6 Occupations in December 2015, of which 9,216 were unique. This is a Posting Intensity of 6-to-1, meaning that for every 6 postings there is 1 unique job posting. This is higher than the Posting Intensity for all other occupations and companies in the region (4-to-1), indicating that companies may be trying harder to hire these positions. (EMSI Q3 2015)

In the COE Statewide study: Information Technology Technician Pathway Labor Market Analysis; Lori Sanchez, LA/OC COE Director, and Juan Madrigal, Research Assistant support the IT Technician Pathway developed by the ICT/DM state-wide Sector Navigator. Most notable is the 5-year ICT industry growth of 115,000 jobs by 2019. “Industries with the largest job growth in absolute terms are Scientific and Technical Consulting Services (37,719 jobs), Customer Computer Programming Services (21,673 jobs), and Computer System Design Services (17, 026 jobs). Combined, these industries, are anticipating adding new jobs numbering over 76,000 over the next five years.” (pg. 5)

4. **List all courses required for program completion, including core requirements, restricted electives and prerequisites. The ITTP Stage III aligned course titles and course numbers must also be listed on the ICT/DM ITTP website.**

Statewide Identified Skill Proficiency (Aligned industry credential in parenthesis)	IT-MC or C-ID	Course Number: Specific to your college	Course Title: Specific to your college	Units
Includes Courses and Units from ITTP Stage I and II				
Routing and Switching Essentials (CCENT)	ITIS 151	<u>CIS 042</u>	<u>CCNA R&S: Routing and Switching Essentials</u>	<u>3.0</u>
Installing, Configuring, and Administering Linux Operating System		<u>CIS 040</u>	<u>Unix/Linux Administration</u>	<u>3.0</u>

(CompTIA Linux+)				
Certified Ethical Hacker/Cybersecurity (CEH by E.C.)	ITIS 164	CIS 063	Introduction to Cybersecurity: Ethical Hacking	3.0
	ITIS 110	CIS 011	Information and Communication Technology Essentials	4.0
	ITIS 150	CIS 041	CCNA R&S: Introduction to Networks	3.0
	ITIS 155	CIS 045	MCSA: Microsoft Windows System Administration 1	4.0
	ITIS 160	CIS 061	Introduction to Information Systems Security	3.0