Notification of Request for Authorization under the Degree-Granting Institutions Act

Date posted: March 10, 2017

Institution: Perry Technical Institute

Accreditation: Accrediting Commission of Career Schools and Colleges (ACCSC)

Current status: Authorized to offer degree programs in Washington State

Nature of request: Authorization to offer an additional degree program

Proposed programs: Associate of Applied Science in Information Technology & Communication Systems

Locations: Perry Technical Institute
2011 W. Washington Avenue
Yakima, WA 98903

Background:

Perry Technical Institute is a private non-profit institution. It has operated for many years as a non-degree-granting institution offering vocational programs. In 2012, they began offering one associate-level program.

Nature of the review:

Prior to granting authorization to offer new degree programs in Washington State, the Washington Student Achievement Council/Degree Authorization reviews elements such as program outcomes, course requirements, method of course delivery, faculty credentials, and student services.

Information on the additional programs can be found at the end of this notice.

Timeline:

The WSAC will accept comments on this application until March 24, 2017.

Any individuals with knowledge that may indicate the institution and/or the program does not meet the authorization requirements of WAC 250-61 are requested to submit comments to: Degree Authorization.

If you would like to know more about the current law and regulations that govern the program, they can be found at the following links: the statute is Chapter RCW 28B.85 and the regulation is WAC 250-61.

information technology & communication systems

Perry Technical Institute's Information Technology & Communication Systems program teaches the theories and skills needed to work in all areas of communications technology – electronics theory, personal computers, wireless communications, telephone systems, transmission equipment, alarm systems, and data networking and administration.

The program is divided into four six-month sections of curriculum and combines classroom and lab projects to provide students with the proper balance of theory and hands-on experience.

Students prepare to earn numerous industry certifications including CompTIA, Cisco, and FCC. The program is approved by the State of Washington as a two-year Limited Energy (06) Specialty Electrical training program. Graduates may be credited with up to one year towards the two years required to be eligible to take the certification exam for the Limited Energy (06) Specialty Electrical License Throughout the program, students prepare themselves for the workforce. Resume writing, interview skills, and documentation of their experience at Perry Technical Institute in a portfolio enable the student to conduct an effective job search.

The goal of Perry Technical Institute's Information Technology & Communication Systems program is to provide graduates with the wide variety of skills necessary to obtain entry-level employment and achieve success in their careers.

The Information Technology & Communication Systems program is 24 months in length (eight quarters). The student will earn 160.5 credit hours which are 2,688 clock hours. Tuition is payable on a quarterly basis. There are four quarters in an academic year.

This training program concludes with an externship off campus, or with the completion of a capstone project on campus. The student to instructor ratio for the Information Technology & Communication Systems program is 24:1.

PROGRAM OUTLINE

			Clock Hours	Credit Hours
Quarter 1	IT 110	Electronics: Fundamentals I	176	10.0
	IT 111	Applied Mathematics for Electronics I	100	6.0
	IT 112	Applied Mathematics for Electronics II	60	3.5
			336	19.5
Quarter 2	IT 120	Electronics: Fundamentals II	156	10.0
	IT 121	Wireless Technology	180	11.5
			336	21.5
Quarter 3	IT 130	Computer Hardware Fundamentals	143	9.0
	IT 131	Computer Software Fundamentals	133	8.5
	IT 132	Communications	60	3.5
			336	21.0
Quarter 4	IT 140	Network Server Operating Systems	210	13.0
	IT 141	Network Server OS Practicum	126	8.0
			336	21.0
Quarter 5	IT 210	Cisco Networking I	276	16.0
	IT 211	Cisco Networking II	60	3.5
			336	19.5
Quarter 6	IT 220	Cisco Networking II (continued)	216	12.5
	IT 221	Cisco Networking III	120	7.0
			336	19.5
Quarter 7	IT 230	Basic Telephony & Cabling Standards	106	6.5
	IT 231	Voice Communication Systems I	165	10.5
	IT 232	Human Relations	65	4.0
			336	21.0
Quarter 8	IT 240	Voice Communication Systems II	112	7.0
	IT 241	Limited Energy	104	6.5
	IT 242E	Externship	120	4.0
			336	17.5
		Program Totals	2,688	160.5

INFORMATION TECHNOLOGY & COMMUNICATION SYSTEMS COURSE DESCRIPTIONS

IT 110 Electronics: Fundamentals I
Basic electronic components and DC circuit operation are introduced including test equipment and tools. DC network analysis, AC circuits, and their effect on reactive components are covered as well. Application of the technical knowledge acquired in the classroom to practical electronic circuits in a lab environment. The concepts of teamwork, analytical problem solving, and troubleshooting are introduced. The students begin preparing a portfolio, documenting their experiences and training through the program.

IT 111 Applied Mathematics for Electronics I
This course will focus on the basics of Algebraic practices, including general numbers, order of operation, exponents, addition/subtraction of positive and negative numbers, multiplication/division of polynomials, use of equations and powers of ten.

IT 112 Applied Mathematics for Electronics II
Mathematics required to evaluate and understand the electronic circuits and equipment which will be covered.

IT 120 Electronics: Fundamentals II
Advanced DC and AC electronics, transistors, and integrated circuit operational amplifiers. Boolean algebra and binary arithmetic provide the basis for the understanding of digital logic circuits utilizing logic gates and combinational logic. Application of the technical knowledge acquired in the classroom to practical power supplies, transistor amplifiers and switches, and operational amplifier circuits, digital circuits in a lab environment.

IT 121 Wireless Technology
Radio frequency theory, noise, bandwidth, analog and digital modulators. RF transmission and reception, propagation, transmission lines, and antenna systems are covered. Lab projects enable the application of the technical knowledge acquired in the classroom to RF modulators, radio receivers, antenna systems, and transmitters.

IT 130 Computer Hardware Fundamentals
Theory, operation, assembly, and maintenance of personal computer hardware and peripheral devices, in a hands-on lab environment. Preparation for the CompTIA A+ certification. Hardware installation and troubleshooting is accomplished which allows the student to apply the technical knowledge acquired in the classroom.

IT 131 Computer Software Fundamentals
Operation of PC operating systems, including: software installation, management, utilities, and troubleshooting in a lab environment. Students experience Workstation configuration using different operating systems as well as virtualization software teaching students the skills necessary to troubleshoot a variety of computer systems.

IT 132 Communications
This course will focus on the basics of technical writing and documentation, along with effective verbal communications and working effectively as a team. Students study and apply effective communication techniques, problem resolution skills, and how to handle difficult situation with an emphasis on customer service.

IT 140 Network Server Operating Systems
Installation and configuration of Windows server. Configuration of virtual machines and networks, DHCP and DNS services, domain controllers and active directory along with group policy and security policies. Preparation for the Microsoft Server certification. Technical knowledge acquired in the classroom will be utilized in a lab setting. Installing, configuring and troubleshooting a Windows server and the utilities involved.

IT 141 Network Server OS Practicum
Continuation of Windows server implementation. Principles, design, implementation, and administration of the latest industry network architectures and topologies. Virtualized network environments to provide service and applications to end users are covered, as well as network storage and cloud infrastructure. Application of this knowledge will be utilized in a lab environment.

IT 210 Cisco Networking I
Intro to Networking—This course introduces the architecture, structure, functions, components and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

IT 211 Cisco Networking II
Routing and Switching—This course describes the architecture, components and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPvl, RIPng, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both 1Pv4 and 1Pv6 networks.

IT 220 Cisco Networking II (continued)

IT 221 Cisco Networking III
Scaling Networks—This course describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, and STP.

IT 230 Basic Telephony & Cabling Standards
Prepares the student to enter the telephone industry. Cabling installation, telephone sets, and local loop are covered. The history of the industry and industry terms are presented. National Electrical Code and industry cabling and equipment standards are covered. Data cable installer certificate obtained through industry provided certification. (Certification may occur in quarter 7 or 8). Lab exercises allow students hands-on experience with industry standard tools and practice in the installation and testing of copper and fiber optic cable systems for voice and data networks.

IT 231 Voice Communications Systems I
Installation, programming, and troubleshooting of business telephone systems including key systems, hybrids, and an introduction to PBX switching equipment in a simulated business environment. Transmission lines and long distance networks, which tie telephone switches together, are covered. Customer service concepts are presented to enable the student to communicate effectively with the customer. Lab exercises allow students hands-on experience and comprehension in the installation, programming, and maintenance of various business communication systems.

IT 232 Human Relations

Human Relations will help students develop the personal and professional skills needed to be successful in business. Topics include confidence building, self-concept and self-esteem, building positive attitudes, motivation, and effective leadership.

This course is also designed to prepare the student to mount an effective job search. Resume preparation, interview skills, and the job application process are covered as the portfolio preparation process is completed.

IT 240 Voice Communication Systems II

A continuation of quarter 7 Voice Communication Systems. The convergence of voice and data, through the development of Computer-Telephone Integration (CTI) and Voice over Internet (VoIP) concepts. Installation, programming, and troubleshooting of PBX and VoIP equipment in a simulated business environment is accomplished. Voice mail is integrated into the system and the programming of system features is accomplished. Customer service concepts are presented to enable the student to communicate effectively with the customer. Lab exercises allow students hands-on experience and comprehension in the installation, programming, and maintenance of various business communication systems.

IT 241 Limited Energy

Limited Energy Systems: Alarms and amplified sound. Fire alarm system installation, programming, and troubleshooting are covered. Proper installation practices are covered in accordance with the National Electrical Code and NFPA 72: National Fire Alarm Code. Amplified sound and speaker systems, including 70V centralized systems and intercom systems are covered. Introduction to Power over Ethernet (PoE) cable and device installation will also be covered in accordance with the Washington State Limited Energy System guidelines. Lab exercises allow students hands-on experience and comprehension in the installation, programming, and maintenance of various limited energy systems.

IT 242E Externship

Qualifying students have the option of obtaining practical experience in a workplace environment in lieu of the last month of training on campus. Externships must relate to the training that would occur in the last quarter of ITCS and must be approved by the Department Head. If the student does not obtain an externship, he/she will be responsible for completing an on-campus capstone project.

INFORMATION TECHNOLOGY & COMMUNICATION SYSTEMS BOOK AND TOOL LIST

The book and tool list for students in the Information Technology & Communication Systems program is intended to be a minimum requirement to complete the program. The book and tool list will be provided no later than the first day of class. For specifics on cost of books, training materials, uniforms, and tools, please refer to page 15.

INFORMATION TECHNOLOGY & COMMUNICATION SYSTEMS EQUIPMENT LIST

Students in the Information Technology & Communication Systems program utilize the following equipment:

Personal computers and servers Cisco routers
Network switches
Wireless access points
Fluke EtherScope
Fluke network analyzer, cable certifiers, and testers
Digital multi-meters
Oscilloscopes, signal generator, and power supplies
Spectrum analyzers
Cell site test sets
AM/FM signal generators/modulators
Antenna system testers
In-line watt meters
Telephone key system, PBX, and VoIP system
Voice mail system
PA systems 24V and 70V
Fire alarm system