

## INFORMATION TECHNOLOGY (IT) • COMPUTER SUPPORT SPECIALIST

## Program Number 10-154-3 Associate Degree in Applied Science • Four Terms

## **ABOUT THE PROGRAM** Catalog No. Class Title Credit(s) Computers-can you imagine life without them? So much of what we do, whether at work, at home, or somewhere in between, depends on the use of computer information Term 1 systems. If you enjoy using various operating systems, learning all kinds of software 10154104 Introduction to IT 4 applications, doing some programming, troubleshooting hardware and software, and PC Support 1 10154122 3 helping others learn to use technology and information systems, a career as a 10801195 Written Communication OR 3 10801136 English Composition 1 computer support specialist may be the perfect fit for your high-tech talents. 3 10804107 College Mathematics 10809172 Introduction to Diversity Studies OR 3 **PROGRAM OUTCOMES** 10806112 Principles of Sustainability Manage information technology hardware. 16 · Manage software. Support computer networks. Term 2 • Provide end user support. 10150114 Networking I 3 Solve information technology problems. 2 10154124 Information Security Principles 2 · Demonstrate customer service skills as an IT professional. 10154128 Help Desk Fundamentals 10154175 PC Support 2 3 3 Business Apps Fundamentals **ADMISSIONS STEPS** 10154102 10801196 Oral/Interpersonal Communication 3 Work with Admissions Specialist to: 16 - Submit application and \$30 fee. - Complete an assessment for placement (Accuplacer or ACT). Term 3 - Submit official transcripts (high school and other colleges). 10150173 Server Administration 1 3 · Meet with program advisor/counselor to discuss program details. 3 10150180 Small Office Home Office Networking 2 10154127 Data Assurance **APPROXIMATE COSTS** 3 10154129 Help Desk Advanced • \$132 per credit (resident) 2 10154150 Financial Systems Support \$198 per credit (out-of-state resident) 10809196 Introduction to Sociology 3 16 · Other fees vary by program (books, supplies, materials, tools, uniforms, health-related exams, etc.) Visit gotoltc.edu/financial-aid/tuition-and-fees for details. Term 4 **PLACEMENT SCORES** 10154121 2 DataBase Concepts 10154103 Training and Documentation 2 Accuplacer/ACT scores will be used to develop your educational plan. Contact your 10154105 IT-Career and Professional Development 2 program advisor/counselor for details. 10154159 **Microcomputer Projects** 2 10154152 Database Applications 1 **SPECIAL NOTE** 2 10150125 I inux Students are required to have one USB 80 gig hard drive or greater. 10809195 3 Economics 3 10809198 Introduction to Psychology **CAREER & EDUCATION ADVANCEMENT OPPORTUNITIES** 17 LTC credits transfer to over 30 universities. For more information visit gotoltc.edu/ future-students/transfer. **TOTAL 65** CONTACT Tanya Boettcher, Admissions Specialist 920.693.1280 · tanya.boettcher@gotoltc.edu

Curriculum and Program Acceptance requirements are subject to change. Program start dates vary; check with your advisor/counselor for details.





BUSINESS APPS FUNDAMENTALS...prepares the learner to evaluate, use, and support common information system applications that an end-user would use in a typical business environment. Both individual productivity tools as well as enterprise tools are examined. The competencies in the course will articulate to other courses in the information technology programs. Applications used will include Open Source Business Suites, Google Apps suite and Market Place applications, Gmail, calendars, surveys, video portals, and more.

**COLLEGE MATHEMATICS**...is designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. PREREQUISITE: 10834109 Pre-Algebra or equivalent

DATA ASSURANCE...provides the learner with a fundamental understanding of computer security principles and implementation; technologies used and principles involved in creating a secure computer environment; authentication; types of attacks and malicious code; e-mail, Web applications, remote access, and file and print services; intrusion detection systems, firewalls, and physical security concepts. The student will have a variety of hands-on and case project assignments that reinforce the concepts read in each chapter.

DATABASE APPLICATIONS...is a project-based course in which learners will build and implement a relational database application utilizing the principles of sound database design acquired in the Database Concepts course. Learners will define the functionality's, implement, build and populate the database, document the database project, and demo their project. COREQUISITE: 10154121 Database Concepts

DATABASE CONCEPTS...prepares the learner to differentiate among the primary DBMS components; determine the difference in data models; use Query By Example and relational algebra; develop SQL statements; apply principles of database integrity, security and normalization; reconstruct poorly designed table structures; develop a relational database design using data requirement analysis and specification methods; and examine additional DBMS functions.

ECONOMICS...provides the participant with an overview of how a market-oriented economic system operates, and it surveys the factors which influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems. growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

FINANCIAL SYSTEMS SUPPORT...prepares the learner to support a variety of financial software, including spreadsheets, financial management, and accounting/generalledger formats with emphasis on data entry, report generation, and integration.

HELP DESK FUNDAMENTALS...provides the learner with the knowledge required to become a Help Desk Support technician. Students will learn fundamental Help Desk concepts such as: Help Desk operations, roles and responsibilities, processes and procedures, tools and technologies, individual and team performance measures, and how to provide support as a Help Desk professional.

HELP DESK-ADVANCED...expands the learners' ability to troubleshoot all information technology issues utilizing Help Desk and Asset Management applications. Learners will expand their knowledge of ITIL practices and procedures used to manage an IT operation and its associated infrastructure. Communication, documentation, and teamwork skills are enforced. PREREQUISITE: 10154128 Help Desk Fundamentals

**INFORMATION SECURITY PRINCIPLES...** introduces the learner to Information Systems Security. Students will review and analyze the control and security concerns in the information systems environment; the security challenges created from the emergence of new technology and the changing internal and external environments; and the effect of legal, regulatory, and current security technology on policy development.

**INTRODUCTION TO IT**...introduces student to IT field to basic concepts and terminology of a computer system hardware and software, Operating Systems (including Mac OS), and Networks; applied skills include: managing computer data files; protecting against computer viruses; creating simple web pages; producing electronic word documents, spreadsheets and presentations; examining techniques of systems analysis and design, programming languages and database systems. Students introduced to the beginning concepts of creating a portfolio.

**INTRODUCTION TO PSYCHOLOGY**...introduces students to a survey of the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

**INTRODUCTION TO DIVERSITY STUDIES**...introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, religion are explored. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

**INTRODUCTION TO SOCIOLOGY**...introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

IT-CAREER AND PROFESSIONAL DEVELOPMENT...introduces students to job seeking skills and work environment communications skills. Written and oral communication skills needed in the work place will be emphasized. Students will build a resume, create a cover letter and follow up letters. Participate in job-seeking skills, which include research of a particular job and company and participating in a mock interview. Preparing a portfolio that proves competency in all program outcomes will be required. Course should be taken in last semester of course work.

LINUX...is a hands-on course designed to provide the learner with the skills to install the Linux operating system, use its command-line and graphical user interfaces, manage system resources, and create scripts. The course will also introduce the learner to Linux system administration including the installation and administration of users, files, software, networking, and Internet and intranet services.

MICROCOMPUTER PROJECTS...provides experience as a member of a computer implementation team involved in converting to a new, automated system. Experiences include applying various microcomputer software and hardware tools to solving advanced business problems and project management.

**NETWORKING 1**...is a lecture/hands-on course designed to introduce students to network fundamentals. Topics covered include: OSI Reference Model; LAN and WAN topologies; cabling systems; access methods; protocols; Internet working devices (e.g. hubs, bridges, routers, switches, etc.); and basic network design.

**ORAL/INTERPERSONAL COMMUNICATION**...provides students with the skills to develop speaking, verbal and nonverbal communication, and listening skills through individual speeches, group activities, and other projects. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

PC SUPPORT 1...is the first course of the two-course A+ series that helps those seeking to become entry-level IT professionals by providing skills and knowledge necessary to perform the following tasks on personal computer hardware and operating systems: installation, PC building, system upgrades, repair, system configuration, troubleshooting, problem diagnosis, and preventative maintenance. The course covers the objectives of the CompTIAA+ exams but is not designed nor intended to be a "test prep" course. Additional resources as well as work experience are required in order to pass the exams.

PC SUPPORT 2...is the second course of the two-course A+ series that helps those seeking to become entry-level IT professionals by providing skills and knowledge necessary to perform the following tasks on personal computer hardware and operating systems: installation, PC building, system upgrades, repair, system configuration, troubleshooting, problem diagnosis, and preventative maintenance. The course covers the objectives of the CompTIA A+ exams but is not designed nor intended to be a "test prep" course. Additional resources as well as work experience are required in order to pass the exams. PREREQUISITE: 10154122 PC Support 1 or CONDITION: CompTIAA+ Essentials Certification

SERVER ADMINISTRATION 1...is a hands-on course designed to introduce the learner to the installation and configuration of Windows Server servers. The student will learn how to install and configure servers, configure server roles and features, configure Hyper-V, deploy and configure core network services, install and administer Active Directory (AD), and create and manage Group Policy. PREREQUISITE: 10154104 Intro to IT

SMALL OFFICE HOME OFFICE NETWORKING...provides the learner with a background in networking fundamentals and the skills to design and build a home network for file sharing and internet access, take an in-depth look at wireless technology, secure a wireless network, and understand fundamental computer security principles and implementation.

TRAINING AND DOCUMENTATION...provides the learner with the skills to develop various types of user documentation in hard copy and on-line formats. In addition, the learner will develop oral and written training skills necessary to provide individual and group end-user training.

WRITTEN COMMUNICATION...teaches the writing process, which includes prewriting, drafting, revising, and editing. Through a variety of writing assignments, the student will analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Keyboarding skills are required for this course. It also develops critical reading and thinking skills through the analysis of a variety of written documents. PREREQUISITE: 10831103 Intro to College Wrtg equivalent and COREQUISITE: 10838105 Intro Rdg & Study Skills or equivalent

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