

COMPUTER INFORMATION SYSTEMS (107)

107-029. Project Management for IT. (3 Credits)

Successful Project Management can be a substantial business asset. The Information Technology field as a whole requires students to understand the business needs of an IT project as well as understanding the benefits of successful implementation of a project. This course will teach students the insights of project management. This includes the tools that can help manage IT based projects, and also incorporates Microsoft Project software to enhance the ability to properly manage a project, developing a project charter, team selection, constraints, stakeholder communication, and other project success strategies. See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=107&num=029>)

107-061. Google Technical Support Fund. (1 Credit)

In this course, learners are introduced to the world of information technology, or IT. Participants will learn about the different facets of IT, like computer hardware, the Internet, computer software, and job-related skills. They will also learn about the history of computers, and the pioneers who shaped the world of computing that we know today. This course covers a wide variety of topics, and it is designed to give an overview of what's to come in the Google IT Support Professional Certificate coursework. People who complete this course will be able to do the following: Understand how the binary system works, Assemble a computer from scratch, Choose an operating system and install it on a computer, Understand what the Internet is, how it works, and the impact it has in the modern world, Learn how applications are created and how they work inside computers, Utilize common problem-solving methods and soft skills in an IT setting.

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=107&num=061>)

107-062. Google Bits Bytes of Network. (1 Credit)

This course is designed to provide a full overview of computer networking. It covers everything from the fundamentals of modern networking technologies and protocols to practical applications and network troubleshooting. People who complete this course will be able to do the following: Describe computer networks in terms of a five-layer model, Understand all of the standard protocols involved with TCP/IP communications, Grasp powerful network troubleshooting tools and techniques, Learn network services like DNS and DHCP that help make computer networks run.

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=107&num=062>)

107-063. Google Operating Systems. (1 Credit)

In this course, participants will learn how to use Windows and Linux, two major operating systems that are core components of IT infrastructures. Through a combination of video lectures, demonstrations, and hands-on practice, students will become familiar with the main components of an operating system and how to perform critical tasks such as managing software, managing users, and configuring hardware. People who complete this course will be able to do the following: Navigate the Windows and Linux file systems using a graphical user interface and a command line interpreter, Set up users, groups, and permissions for account access, Install, configure, and remove software on the Windows and Linux operating systems, Configure disk partitions and file systems, Understand how system processes work and how to manage them, Work with system logs and remote connection tools, Utilize their knowledge of operating systems to troubleshoot common issues in an IT support specialist role.

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=107&num=063>)

107-064. System Admin IT Infrastructure. (1 Credit)

This course will transition learners from working on one computer at a time to working with a whole fleet of computers. Systems administration is the field of IT that's responsible for maintaining reliable computer systems in multi-user environments. In this course, participants will learn about the infrastructure services that keep all organizations, big and small, up and running. Topics include how to manage and configure servers, and how to use industry tools to manage computers, user information, and user productivity. Finally, the course will explain how to recover an organization's IT infrastructure in the event of a disaster. People who complete this course will be able to do the following: Utilize best practices for choosing hardware, vendors, and services for an organization, Understand the most common infrastructure services that keep an organization running, how they work, and how to manage infrastructure servers, Manage an organization's computers and users using the Active Directory and OpenLDAP directory services, Choose and manage the tools that an organization will use, Back up an organization's data and recover IT infrastructure in the event of a disaster, Utilize systems administration knowledge to plan and improve processes for IT environments.

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=107&num=064>)

107-065. Google IT Security. (1 Credit)

This course covers a wide variety of IT security concepts, tools, and best practices. It introduces threats and attacks and the many ways they can show up, and then discusses encryption algorithms and how they're used to safeguard data. From there, the course dives into the "three A's of information security"—authentication, authorization, and accounting. It also covers network security solutions, ranging from firewalls to Wi-Fi encryption options. The course then pulls the subject matter together with a look at how all of those elements can be incorporated into a multilayered, in-depth security architecture. It concludes with recommendations on how to foster a culture of security within a team or an entire organization. People who complete this course will understand the following: How various encryption algorithms and techniques work, and their benefits and limitations, Various authentication systems and types, The difference between authentication and authorization. At the end of this course, learners will be able to do the following: Evaluate potential risks and recommend ways to reduce risk, Make recommendations about how best to secure a network, Help others to understand security concepts and protect themselves.

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=107&num=065>)

107-102. IT Support. (2 Credits)

Develop a comprehensive understanding of the knowledge, skills and abilities necessary to support IT. Get an introduction to IT service management and issue resolution along with debugging, end-user instruction, training and user needs analysis. Develop communication skills, critical thinking, trouble-shooting and professionalism through hands-on labs.

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=107&num=102>)

107-103. IT Business Strategies. (3 Credits)

Explore information technology and its relationship within the organization, vendors and the enterprise at the operational, strategic and departmental levels. Understanding IT business strategies is key to understanding IT. This course analyzes ethics in IT, BYOD, outsourcing, IT governance, IT service management, knowledge management, strategic planning and their business impact. Learn key success strategies, including time and project management, organizational skills, collaboration and critical business skills related to information technology.

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=107&num=103>)

107-119. System Analysis Agile Methods. (3 Credits)

Develop the conceptual and technical foundations needed for effective systems analysis, design and implementation along with project management skills for systems development. Learn the traditional approach to systems analysis with an emphasis on deliverables, as well as Scrum, the agile approach and the basic artifacts of Scrum. Focus on detail analysis, project management and teamwork.

Prerequisites: 152-112 with a minimum grade of C or 152-115 with a minimum grade of C or 156-108 with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=107&num=119>)

107-123. Internship IT. (2 Credits)

Gain a broader educational experience through work in this IT internship experience. Your instructor/coordinator will work closely with the worksite supervisor toward common educational objectives and goals. To complete an internship, please contact Career Connections at 262.695.7848 or internshipdepartment@wctc.edu to verify that you have met the prerequisites.

Prerequisites: Approval of Co-op Ed Office

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=107&num=123>)

107-137. Internship - IT. (1 Credit)

The IT Internship experience provides valuable work experience specific to the IT student major. Our primary focus is to give students a broader educational experience through work. The WCTC instructor/coordinator will work closely with the work site supervisor toward common educational objectives and goals. This course is specifically geared towards student success in the IT career fields. To complete an internship, WCTC must first verify that students have met the prerequisites. Please contact the Career Connections Department at 262.695.7848 or internshipdepartment@wctc.edu for assistance.

Prerequisites: Approval of Co-op Ed Office

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=107&num=137>)

107-184. IT Network Capstone. (2 Credits)

Showcase your IT knowledge in this independent, self-paced, project-based capstone course. This course requires a minimum of three hours of lab time per week. Work closely with WCTC faculty who will assess program outcomes and encourage student success in the IT career field. Prerequisites: Associate Dean approval and 150-117 with a minimum grade of C and 150-188 with a minimum grade of C and 151-106 with a minimum grade of C and 150-118 with a minimum grade of C and 150-137 with a minimum grade of C and 150-165 with a minimum grade of C and 152-101 with a minimum grade of C and 631-183 with a minimum grade of C and 150-153 with a minimum grade of C and 150-121 with a minimum grade of C and 150-166 with a minimum grade of C and 150-173 (may be taken concurrently) with a minimum grade of C and 107-103 (may be taken concurrently) with a minimum grade of C See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=107&num=184>)