

**MiraCosta College**  
**Computer Studies Department**

~

**CSIT: Computer Studies and Information Technology**  
**Course Catalog**

**Effective Fall 2010 (pending final approval)**

**Table of Contents**

CSIT Courses .....	3
CSIT 100: Computer Basics I, 1.5 Units .....	3
CSIT 105: Computer Basics II, 1.5 units .....	3
CSIT 110: Computer Applications, 3.0 Units.....	3
CSIT 115: Intermediate Computer Applications, 3.0 Units.....	3
CSIT 120: Fundamentals of Computer Information Systems, 3.0 Units .....	3
CSIT 125: Microsoft Word for Business, 3.0 Units.....	3
CSIT 128: Microsoft Excel for Business, 3.0 Units .....	4
CSIT 131: Microsoft Access for Business, 3.0 Units .....	4
CSIT 134: Microsoft PowerPoint for Business, 3.0 Units .....	4
CSIT 137: Google Apps for Business, 3.0 Units .....	4
CSIT 146: Internet Presence for the Small and Medium Business, 3.0 Units .....	4
CSIT 149: Introduction to Windows for Business and Power Users, 3.0 Units .....	4
CSIT 155: Web 2.0, 3 Units .....	5
CSIT 160: Computers in Society, 3.0 Units .....	5
CSIT 171: Fundamentals of Computer Networks and Security, 4.0 Units .....	5
CSIT 172: Windows Networking Environment, 4.0 Units .....	5
CSIT 173: Desktop Support, 4.0 Units.....	5
CSIT 174: TCP/IP and Network Infrastructure, 4.0 Units.....	6
CSIT 175, Linux Networking Environment, 4.0 Units.....	6
CSIT 176, Network Mail Services, 4.0 Units.....	6
CSIT 177, System Integration - Small Business Server, 4 Units .....	6
CSIT 190, Industry Certification Preparation, 3.0 Units.....	6
CSIT 195: Computer Studies Portfolio Development, 1.0 Unit .....	6

CSIT Certificates .....	7
CSIT Certificates of Achievement (also Associate in Arts Degrees) .....	7
Computer Studies .....	7
Computer Applications Professional for Business .....	7
Network and Desktop Administration .....	8
CSIT Certificates of Achievement .....	9
Certified Computer Desktop Support Specialist .....	9
E-Commerce .....	9
Microsoft Certified Application Specialist (MCAS) for Business .....	10
CSIT Certificates of Proficiency .....	11
Computer Competencies for the Workplace .....	11
Computer Applications User .....	11
Emerging Technologies in Computer Studies .....	12

## **CSIT Courses**

### **CSIT 100: Computer Basics I, 1.5 Units**

This first in a two-course sequence is intended for students wishing to develop or strengthen their basic computer skills. Topics include basic computer techniques and literacy in computer concepts, Windows, working with files and folders, word processing, browsing and searching the Web, sending and receiving email, and academic computing course management systems, such as Blackboard. Upon successful completion of the course, students will be prepared for CSIT 105, Computer Basics II.

Contact Person: Steve Isachsen

### **CSIT 105: Computer Basics II, 1.5 units**

This second in a two-course sequence is intended for students wishing to develop or strengthen their basic computer skills. Picking up where CSIT 100 leaves off, this course includes new and expanded study in the areas of basic computer techniques and literacy in computer concepts. Topics include Windows, hierarchical file and folder management, multi-tasking, word processing, safe and ethical Internet practices, email, spreadsheet creation, computer maintenance, security, and purchasing a computer.

Contact Person: Steve Isachsen

### **CSIT 110: Computer Applications, 3.0 Units**

This course provides an in-depth, hands-on introduction to computer applications and fundamentals. Topics include computer concepts, the operating system, and word processing, spreadsheet, presentation, database, and Web browser applications. The course emphasizes applied computer applications skills and techniques, computer concepts and ethical considerations, and the use of computer applications as integrated tools to perform professional-level analyses. This course prepares students for the CSUSM computer competency exam. (Formerly CIS 100.)

Contact Person: Steve Isachsen

### **CSIT 115: Intermediate Computer Applications, 3.0 Units**

Picking up where CSIT 110 leaves off, this course features the use and integration of computer applications at the intermediate level. Topics include further development of concepts, skills, and techniques in word processing, spreadsheet, presentation, and database applications. (Formerly CIS 105.)

Contact Person: Steve Isachsen

### **CSIT 120: Fundamentals of Computer Information Systems, 3.0 Units**

This course covers the concepts of information systems in business, which include the integration of information technology, e-commerce, systems analysis, data storage, data processing, security, and communications. The course applies information system concepts by developing solutions to business problems using financial analysis and database management tools, such as Microsoft Excel and Access. This course is intended for students majoring in Business and Information Systems. It does not satisfy the CSUSM computer literacy requirement. (Formerly CIS 101.)

Contact Person: June Porto

### **CSIT 125: Microsoft Word for Business, 3.0 Units**

Students learn how to use Microsoft Word, the industry-standard tool for word processing in business environments. This comprehensive course includes fundamentals, such as document design, section breaks, table of contents, graphics, columns, and tables, as well as more advanced features, such as document collaboration, workgroup tools, template customization, mail merge, object linking, forms,

security, and Web enabling. This course helps prepare students for the Microsoft Certification Exam.  
Contact Person: Steve Isachsen

**CSIT 128: Microsoft Excel for Business, 3.0 Units**

Students learn how to use Microsoft Excel, the industry standard tool for spreadsheet and chart creation in a business environment. This comprehensive course includes fundamentals, such as workbook and worksheet design, formulas, functions, and charts, as well as more advanced features, such as pivot tables, what-if analysis, three-dimensional worksheets, goal seek, and collaboration tools. This course helps prepare students for the Microsoft Certification Exam.

Contact Person: Steve Isachsen

**CSIT 131: Microsoft Access for Business, 3.0 Units**

Students learn how to use Microsoft Access, the industry standard tool for database creation in a business environment. This comprehensive course includes fundamentals, such as relational database design theory, tables, queries, reports, and forms, as well as more advanced features, such as complex validation rules, action queries, report controls, form automation, database customization, and data integration tools. This course helps prepare students for the Microsoft Certification Exam.

Contact Person: Steve Isachsen

**CSIT 134: Microsoft PowerPoint for Business, 3.0 Units**

Students learn how to use Microsoft PowerPoint, the industry standard tool for creating electronic presentations in business environments. This comprehensive course includes fundamentals, such as electronic presentation design and delivery concepts, slide layout, graphics, diagrams, charts, and sound, as well as more advanced features, such as complex animation, transitions, action buttons, video, custom backgrounds, and collaboration tools. This course helps prepare students for the Microsoft Certification Exam.

Contact Person: Steve Isachsen

**CSIT 137: Google Apps for Business, 3.0 Units**

In this course, students learn how to use Google Apps, a collection of free Web-based productivity tools, in a business environment. Topics include Google Search, Gmail, Google Calendar, Google Docs, Google Spreadsheets, Google Presentations, and emerging trends in Google Apps. Students use the Internet to access their files and the tools to manipulate and collaborate with them.

Contact Person: Steve Isachsen

**CSIT 146: Internet Presence for the Small and Medium Business, 3.0 Units**

This course teaches the principles and technologies involved in creating a Web presence for a small or medium-sized business (SMB). It addresses the needs of both online and traditional brick and mortar businesses and provides students with a basic working knowledge of how to sell products and services on the Web. It covers aspects of business and marketing planning, a survey of Web technologies, such as HTML, XHTML and CSS, use of digital media, building an online store, e-commerce security, electronic payment systems, international and legal issues, Search Engine Optimization (SEO), and current marketing trends. Students create a starter e-business Web site or improve an existing site that can be used for their business or to help them get a job in the field. (Formerly CIS 191.)

Contact Person: Martin Parks

**CSIT 149: Introduction to Windows for Business and Power Users, 3.0 Units**

This course introduces students to the current Microsoft Windows operating system. Students learn how

to install the operating system, create and manage user accounts, view system components and properties, install applications, switch between different application windows, manage files and folders, and customize the Windows environment. The course also covers networking, file and folder sharing, computer security, malware, and safe Internet use. (Formerly CIS 185.)

Contact Person: Martin Parks

### **CSIT 155: Web 2.0, 3 Units**

This course examines Web 2.0 with a focus on Web applications and services that facilitate creativity, collaboration, and information sharing among users. It explores historical development as well as emerging trends. Students preview as well as learn to manipulate the most significant various Web 2.0 applications and services, such as wikis, mashups, folksonomies, blogs, podcasts, social media, video sharing, and social networks.

Contact Person: Steve Isachsen

### **CSIT 160: Computers in Society, 3.0 Units**

This course offers a critical examination of the effects and influences of computers on society. It addresses a wide range of issues from the historical perspective to contemporary applications. The course emphasizes criminal and legal matters, privacy and workplace concerns, psychosocial and physiological implications, and emerging trends.

Contact Person: Steve Isachsen

### **CSIT 171: Fundamentals of Computer Networks and Security, 4.0 Units**

This course presents an overview and introduction to computer networking components, network design, operation, protocols, network operating systems, and computer and network security. Students learn the fundamentals of configuring and using secure network resources, such as file servers, printers, e-mail, the Internet, and networked applications. This course prepares students for the CompTIA Network+ and Security+ certification exams. (Formerly CIS 141.)

Contact Person: Martin Parks

### **CSIT 172: Windows Networking Environment, 4.0 Units**

This course provides students with a broad understanding of Microsoft Windows Server and prepares them for network server administration and Windows certification exams. The course focuses on administrative tasks; operating-system selection, installation, and configuration; Active Directory design and implementation; user management; group policy; printers; network services, especially Domain Name System (DNS); and system security, monitoring, and optimization. Students develop skill and apply their knowledge through hands-on projects and case-study assignments. (Formerly CIS 142.)

Contact Person: Martin Parks

### **CSIT 173: Desktop Support, 4.0 Units**

This course prepares students to support desktop users. It covers desktop operating system and computer implementation and support and emphasizes workstation integration in the network environment. Topics include installation and upgrades, configuration, management, operation, optimization, and troubleshooting of desktop operating systems and applications. Students diagnose problems in connectivity, manage security settings, troubleshoot hardware and software issues, and optimize system performance. (Formerly CIS 143.)

Contact Person: Martin Parks

**CSIT 174: TCP/IP and Network Infrastructure, 4.0 Units**

This course introduces students to the theory and application of the Transmission Control Protocol/Internet Protocol (TCP/IP) upon which the Internet is based. Students learn the layered functions of the TCP/IP stack and how they relate to Internet architecture. Topics include TCP/IP addressing, subnetting, host and domain name resolution, routing considerations, and practical management of TCP/IP protocols and services. Students install, configure, manage, and troubleshoot network servers and services in a domain environment. The course emphasizes directory service and domain name system (DNS) administration. (Formerly CIS 144.)

Contact Person: Martin Parks

**CSIT 175, Linux Networking Environment, 4.0 Units**

This course covers the installation, configuration, management, and troubleshooting of the Linux operating system. It includes basic topics related to the administration of Linux systems, basic scripting, system performance and tuning, troubleshooting, system security, package installation and removal, logging, scheduling, and Linux tools. The course also introduces Web servers, mail servers, and internetworking with other network-operating systems. (Formerly CIS 145.)

Contact Person: Martin Parks

**CSIT 176, Network Mail Services, 4.0 Units**

This course covers topics related to the implementation and support of network mail systems, such as installation, configuration, management, operation, optimization, and troubleshooting. It emphasizes mail server integration with Active Directory in the Enterprise network environment. Mail server software may include Microsoft Exchange Server. Implementations include server virtualization. (Formerly CIS 194.)

Contact Person: Martin Parks

**CSIT 177, System Integration - Small Business Server, 4 Units**

This course covers server integration and troubleshooting based on Microsoft Small Business Server or an Open Source equivalent. It challenges students to use server virtualization and integrate Windows Server in an Active Directory environment with Exchange Server, Structured Query Language (SQL) Server, Share Point Server and Web Services, and Internet Security and Acceleration Server (Web Caching and Firewall). Students install and configure the servers, create accounts, and maintain security and functionality on systems connected to the Internet. They also troubleshoot problems and update, manage, and protect their systems from Internet intrusions and other challenges. (Formerly CIS 204.)

Contact Person: Martin Parks

**CSIT 190, Industry Certification Preparation, 3.0 Units**

This course provides students with information and practice to prepare for industry certification exams. Students choose a module related to certification exams in the following discipline areas: administrative professional, computer applications, networking, medical coding, medical billing, medical language specialist, programming. Modules present information on test taking, test presentation, time management, and practice exams.

Contact Person: Kathy Striebel

**CSIT 195: Computer Studies Portfolio Development, 1.0 Unit**

This course teaches students how to create a portfolio to professionally display their best work and to increase job opportunities. Topics include defining an audience, organizing and adapting a body of work, and formatting and creating a finished portfolio designed to reflect the student's vision and highlight the quality of his or her accomplishments. Note: Students should complete most courses within their chosen

Computer Studies certificate program before enrolling in CSIT 195.  
Contact Person: Steve Isachsen

## **CSIT Certificates**

### **CSIT Certificates of Achievement (also Associate in Arts Degrees)**

#### **Computer Studies**

This certificate provides students with a broad foundation in computer theory and skills. These courses will expose students to a wide range of fundamentals across each of the Computer Studies Department's disciplines. Completing this certificate will prepare individuals to launch or further advance their careers as computer, information technology, or related professionals in a variety of industry sectors.

Contact Person: Steve Isachsen

#### **Required Courses**

BOT 106, Introduction to Office Technology, 3

CS 107, Introduction to Object-Oriented Programming, 3

CSIT 110, Computer Applications, 3

CSIT 120, Fundamentals of Computer Information Systems, 3

CSIT 125, Microsoft Word for Business, 3

or

CSIT 128, Microsoft Excel for Business, 3

or

CSIT 131, Microsoft Access for Business, 3

or

CSIT 134, Microsoft PowerPoint for Business, 3

or

CSIT 137, Google Apps for Business, 3

or

CSIT 146, Internet Presence for the Small and Medium Business, 3

or

CSIT 149, Introduction to Windows for Business and Power Users, 3

(Note: Choose one of above 7 course from Computer Studies for Business Series)

CSIT 155, Web 2.0, 3

CSIT 160, Computers in Society, 3

CSIT 171, Fundamentals of Computer Networks and Security, 4

CSIT 195, Computer Studies Portfolio Development, 1

MAP 100, Introduction to Medical Administrative Careers, 3

Total Required Units: 29

Total Required Certificate Units: 29

#### **Computer Applications Professional for Business**

This certificate is designed to meet demand in the business community for individuals who are trained in the professional level use of computers and business productivity computer applications. Specific areas of

emphasis include word processing, spreadsheets, database management, electronic presentations, digital imaging, Windows, and Internet applications. Learning to use, integrate, and collaborate effectively with these powerful business productivity tools is essential for those preparing for jobs or wishing to advance in their current job in today's technological workplace.

Contact Person: Steve Isachsen

**Required Courses:**

CSIT 125, Microsoft Word for Business, 3  
CSIT 128, Microsoft Excel for Business, 3  
CSIT 131, Microsoft Access for Business, 3  
CSIT 134, Microsoft PowerPoint for Business, 3  
CSIT 137, Google Apps for Business, 3  
CSIT 149, Introduction to Windows for Business and Power Users, 3  
CSIT 195, Computer Studies Portfolio Development, 1  
MAT 110, Digital Imaging 1: Adobe Photoshop, 3  
Total Required Units: 22

Select at least 6 elective units from the following:

BUS 120, Introduction to Business, 3  
CRLP 101: Introduction to Career Planning, 1  
CRLP 103: Job Success Skills, .5  
CSIT 100, Computer Basics I, 1.5  
CSIT 105, Computer Basics II, 1.5  
CSIT 110, Computer Applications, 3  
CSIT 115, Intermediate Computer Applications, 3  
CSIT 155, Web 2.0, 3  
CSIT 160, Computers in Society, 3  
CSIT 190, Industry Certification Preparation, 3  
MAT 125, Web Design 1: Fundamentals, 3  
MAT 150, Flash 1: Animation and Interactivity, 3  
MAT 170: Digital Imaging 2: Adobe Illustrator, 3  
MAT 180: Publishing 1, Adobe InDesign, 3  
Total Required Elective Course Units: 6

Total Required Certificate Units: 28

**Network and Desktop Administration**

This certificate is designed to meet the demand in the business community for individuals trained in computer networking, network administration, Enterprise networking, and Internet or intranet administration.

Contact Person: Martin Parks

**Required Courses**

CSIT 171, Fundamentals of Computer Networks and Security, 4  
CSIT 172, Windows Networking Environment, 4  
CSIT 173, Desktop Support, 4



CSIT 174, TCP/IP and Network Infrastructure, 4  
Total Required Units: 16

Select at least 4 elective units from the following:

CSIT 175, Linux Networking Environment, 4  
CSIT 176, Network Mail Services, 4  
CSIT 177, System Integration - Small Business Server, 4  
Total Required Elective Course Units: 4

Total Required Certificate Units: 20

### **CSIT Certificates of Achievement**

#### **Certified Computer Desktop Support Specialist**

This certificate is designed to meet the demand in industry for individuals trained to support desktop computer users. Training includes support for application software, operating systems, local area networks, desktop support, and customer service. Individuals can successfully answer, or escalate, calls and inquiries from end users and may seek employment as a help desk technician, customer support representative, computer support specialist, technical support representative, and technical support specialist. In addition, certificate completion helps prepare individuals for the Microsoft Certified Desktop Support Technician (MCDST) certification exams.

Contact Person: Steve Isachsen

Required Courses:

CSIT 110, Computer Applications, 3  
CSIT 149, Introduction to Windows for Business and Power Users, 3  
CSIT 171, Fundamentals of Computer Networks and Security, 4  
CSIT 173, Desktop support, 4  
BUS 137, Customer Service, 3  
Total Required Units: 17

Select at least 6 elective units from the following:

CSIT 115, Intermediate Computer Applications, 3  
CSIT 137, Google Apps for Business, 3  
CSIT 146, Internet Presence for the Small and Medium Business, 3  
CSIT 155, Web 2.0, 3  
CSIT 190, Industry Certification Preparation, 3  
CS 107, Introduction to Object-Oriented Programming, 3  
BUS 290, Business Communication, 3  
Total Elective Units: 6

Total Required Certificate Units: 23

#### **E-Commerce**

The E-Commerce Certificate is designed for individuals interested in exploring the process of conducting

business on the Internet and related design and technical considerations. Students are advised to enroll in CSIT 146 prior to selecting electives.

Contact Person: Martin Parks

**Required Courses**

CSIT 146, Internet Presence for the Small and Medium Business, 3

CSIT 120, Fundamentals of Computer Information Systems, 3

MAT 125, Web Design 1: Fundamentals, 3

MAT 165, Web Design 2: Tools and Techniques, 3

BUS 132, Marketing, 3

Total Required Units: 15

Select at least 6 elective units from the following:

BUS 170, Entrepreneur I, 1.5

BUS 171, Entrepreneur II, 1.5

CSIT 171, Fundamentals of Computer Networks and Security, 4

CSIT 174, TCP/IP and Network Infrastructure, 4

MAT 225, Dynamic Web Development, 3

MAT 235, Web Design 3: Site Design and Architecture, 3

Total Required Elective Course Units: 6-8

Total Required Certificate Units: 21-23

**Microsoft Certified Application Specialist (MCAS) for Business**

The Microsoft Certified Application Specialist (MCAS) for Business certificate is designed for individuals who will work or currently work in a business setting using Microsoft Office business productivity applications as a vital part of their job functions. This certificate will enhance career prospects in a competitive job market by enabling the student to demonstrate proficiency (based on globally recognized Microsoft standards) in the world's foremost desktop computing applications for business. Each course in this certificate offers a comprehensive overview starting with fundamentals and finishing with advanced features. In addition, certificate completion helps prepare individuals for the Microsoft Certified Application Specialist (MCAS) certification exams (see MiraCosta College Business Certification Testing Center).

Contact Person: Steve Isachsen

**Required Courses:**

CSIT 125, Microsoft Word for Business, 3

CSIT 128, Microsoft Excel for Business, 3

CSIT 131, Microsoft Access for Business, 3

CSIT 134, Microsoft PowerPoint for Business, 3

Total Required Units: 12

Total Required Certificate Units: 12

## **CSIT Certificates of Proficiency**

### **Computer Competencies for the Workplace**

This certificate is designed for those who need foundation computer competencies for entry-level jobs in the workplace or for those who are transitioning to a computer-based work environment. The skills and competencies practiced in this certificate will provide computer knowledge and hands-on workplace experiences using computer application software and hardware.

Contact Person: Kathy Striebel

#### **Required Courses:**

BOT 100, Beginning Keyboarding (or typing test at 40 wpm), 1

CSIT 110, Computer Applications, 3

CSIT 120, Fundamentals of Computer Information Systems, 3

CSIT 137, Google Apps for Business, 3

Total Required Units: 9-10

Select at least 5 units from the following:

BOT 102, 10 Key, 1

BOT 113, Basic Office Skills, 1

BOT 110, Word Processing, 3

CSIT 100, Computer Basics I, 1.5

CSIT 105, Computer Basics II, 1.5

CSIT 146, Internet Presence for the Small and Medium Business, 3

Total Elective Course Units: 5

Total Certificate Units: 14-15

### **Computer Applications User**

This certificate is designed to provide individuals with basic computer applications skills and techniques for jobs in any industry. Together, these courses provide a foundation for working with computer applications to proficiently perform essential job functions.

Contact Person: Steve Isachsen

#### **Required Courses:**

CSIT 110, Computer Applications, 3

CSIT 115, Intermediate Computer Applications, 3

Total Required Units: 6

Select at least 3 elective units from the following:

CSIT 100, Computer Basics I, 1.5

CSIT 105, Computer Basics II, 1.5

CSIT 125, Microsoft Word for Business, 3

CSIT 128, Microsoft Excel for Business, 3

CSIT 131, Microsoft Access for Business, 3

CSIT 134, Microsoft PowerPoint for Business, 3

CSIT 137, Google Apps for Business, 3

CSIT 149, Introduction to Windows for Business and Power Users, 3  
CSIT 155, Web 2.0, 3  
MAT 110, Digital Imaging 1, Adobe Photoshop, 3  
MAT 150, Flash 1: Animation and Interactivity, 3

Total Required Elective Course Units: 3

Total Required Certificate Units: 9

### **Emerging Technologies in Computer Studies**

This certificate will provide students with the opportunity to explore emerging technologies in Computer Studies to enhance their future or current work perspectives. Emphasis will be placed on the changing landscape of computers, information, and technology and understanding how trends in these areas may impact current and future business and industry.

Contact Person: Steve Isachsen

#### **Required Courses:**

CSIT 137, Google Apps for Business, 3  
CSIT 155, Web 2.0, 3  
CSIT 160, Computers in Society, 3

Total Required Units: 9

Total Required Certificate Units: 9