

COMPUTER APPLICATIONS

BEFORE ENROLLING IN DEGREE APPLICABLE COURSES, IT IS RECOMMENDED THAT YOU COMPLETE ENGL 001A AND READ 053.

COMPUTER APPLICATIONS (CA)

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 DEPARTMENT: Computer Applications
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Student Learning Outcomes:

The Computer Applications program at Mission College has two areas of emphasis. The Office Administration area is designed to provide skills necessary for success in an office setting, from clerk to supervisor/manager. The Office Information System area is focused on computer application skills necessary to effectively use the computer to increase productivity (without working harder) in an office environment. Upon completion of courses in Computer Applications students will be able to:

- Classify software into appropriate categories (application, operating system, etc.);
- Design and publish WebPages; design and create databases, reports, forms, and presentations;
- Analyze, assess, and produce a business document that is a solution to a given problem (reservation letter, report and budget);
- Demonstrate an increase in keyboarding speed and productivity;
- Apply computer skills with knowledge of application software (PowerPoint, Excel, and Access) to create a professional business document;
- Demonstrate the ability to use a computer operating system (printing and file management);
- Design, predict, assess, estimate, classify a plan to manage a project (launching a new product or starting a new company);
- Produce a professional business document from dictated material, and
- Demonstrate appropriate academic and professional use of the Internet.

Students will be assessed through exams and work that reflects their ability to design and publish web pages, produce professional business documents and use the Internet for business applications.

Career Options:

- Assistant Clerk
- Computer Operator
- Data Entry Operator
- Office Assistant
- User of MS Office

Some career options may require more than two years of college study.

Highlights:

- Hands-on experience in the use of computer for business purposes.
- Instructors, with strong computer backgrounds, that care about your success.
- Skills that can be applied to vocational and transfer courses.

Computer Applications - Level II Certificate of Achievement

The Computer Applications program is designed to provide students with a broad range of experience on some of the popular software packages used in business today. Only courses that have a grade of C or better may be used to satisfy requirements for a certificate.

Major Requirements	Units
CA 033A Word Processing - Course 1	3.0
CA 045A Introductory Microsoft Project	1.0
CA 046D Introduction to Microsoft Powerpoint	1.0
CA 062B An Introduction to Microsoft Excel	1.0
CA 063B Intermediate Microsoft Excel	2.0
CA 071E Microsoft Outlook	0.5
CA 081B Introduction to Microsoft Access	1.0
CA 082B Intermediate Microsoft Access	2.0
CA 096A Internet Use: Personal and Business 1	1.0
CA 096B Internet Use: Personal and Business 2	1.0

Plus 2.5 units from the following: Units

CA 010A Learning the Keyboard	1.0
or	
CA 013 Ten-Key Numeric Keypad	1.0
CA 034D Microsoft Word: Mail Merge	0.5
CA 052 PC for Personal and Professional Use	0.5
CA 055 Palm Pilot - Basic	0.5
CA 084 Oracle: Check It Out!	1.0
CA 096F Introduction to MS Expression Web	1.0
CA 097A Creating Web Pages - Course 1	1.0
Total Units	16.0

Help Desk Specialist Certificate of Achievement

The Help Desk Specialist Certificate is designed to provide students with the basic skills to work in the computer user support industry. Supporting a user has become a major role in many jobs.

Only courses that have a grade of "C" or better will be used to satisfy requirements for a certificate.

Choice of any 16-17 units from the following: Units

BUS 079 Human Relations Applied in Business	3.0
CA 010C Computer Keyboarding Speed and Accuracy	1.0
CA 031B Microsoft Word: Check It Out!!	1.0
CA 038A Computer Applications Internship	2.0
CA 045A Introductory Microsoft Project	1.0
CA 051 Help Desk and Support Specialist	2.0
CA 062B An Introduction to Microsoft Excel	1.0
CA 070 Using MS Windows/Vista	1.0
CA 071E Microsoft Outlook	0.5
CA 081B Introduction to Microsoft Access	1.0
CA 084 Oracle: Check It Out!	1.0
CA 096A Internet Use: Personal and Business 1	1.0
CA 096B Internet Use: Personal and Business 2	1.0
CIS 081 Introduction to Computer Networking	3.0
CIT 041 Microsoft OS Essentials	3.0
CNET 090A Computer Service Technician (A+) -	4.0
CNET 090B Computer Service Technician (A+) -	4.0
COMM 008 Interpersonal Communication	3.0
MGMT 011 Decision-Making Skills	0.5
MGMT 013 Job Stress Management	0.5
MGMT 014 Interviewing Skills	0.5
MGMT 019 Dealing With Difficult People	0.5
MGMT 023 Personal Effectiveness	0.5
Total Program Certificate Requirements:	16.0 - 17.0

Microsoft Office Certificate of Achievement

The Microsoft Office Certificate is designed to provide students with the basic skills to work with this popular application suite, which has become an integral part of many jobs. Only courses that have a grade of "C" or better will be used to satisfy requirements for a certificate.

Core Curriculum Courses (Required) Units

CA 033A Word Processing - Course 1	3.0
CA 033B Word Processing - Course 2	3.0
CA 045A Introductory Microsoft Project	1.0
CA 045B Intermediate Microsoft Project	2.0
CA 046D Introduction to Microsoft PowerPoint	1.0
CA 046E Intermediate PowerPoint	1.0
CA 062B Introduction to Microsoft Excel	1.0
CA 063B Intermediate Microsoft Excel	2.0
CA 071E Microsoft Outlook	0.5
CA 081B Introduction to Microsoft Access	1.0
CA 082B Intermediate Microsoft Access	2.0
Total Program Certificate Requirements:	17.5

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Office Administration - A.S. Degree

Core Curriculum Courses (Required)	Units
ACCTG 021A.....Basic Accounting I	2.0
BUS 028A.....Business Law	3.0
BUS 050.....Administrative Office Procedures	4.0
BUS 078.....Business Communications	3.0
CA 010C.....Computer Keyboarding Speed and Accuracy.....	1.0
CA 013.....Ten Key Numeric Keypad.....	1.0
CA 033A.....Word Processing - Course 1	3.0
CA 033B.....Word Processing - Course 2	3.0
CA 036.....Machine Transcription	3.0
CA 037A.....Computer Usage for the Workplace Professional	3.0
CA 046D.....Introduction to Microsoft Powerpoint	1.0
CA 062B.....Introduction to Microsoft Excel	1.0
CA 081B.....Introduction to Microsoft Access.....	1.0
Plus 11.0 - 13.0 units from the following:	
ACCTG 021B.....Basic Accounting II	4.0
BUS 051.....Introduction to American Business	3.0
BUS 064.....Business Math Using Calculators.....	4.0
BUS 079.....Human Relations Applied in Business.....	3.0
CA 045A.....Introductory Microsoft Project.....	1.0
CA 046E.....Intermediate PowerPoint.....	1.0
CA 063B.....Intermediate Microsoft Excel.....	2.0
CA 096A.....Internet Use Personal & Business 1.....	1.0
CA 096B.....Internet Use Personal & Business 2.....	1.0
MGMT 103.....Functions of Management I	3.0
MKT 056A.....Marketing Principles	3.0
Total Program A.S. Degree Requirements:	40.0 - 42.0

Office Administration Certificate of Achievement

The Office Administration Certificate prepares you to work in an office environment using computers. Your communication skills, computer skills, and application knowledge prepare you for success in any office using today's computers. Only courses completed with a grade of C or better may be used to satisfy requirements for a certificate.

Major Requirements	Units
BUS 078.....Business Communications	3.0
BUS 050.....Administrative Office Procedures	3.0
CA 013.....Ten-Key Numeric Keypad	1.0
.....or	
CA 010C.....Computer Keyboarding Speed and Accuracy	1.0
.....or	
CA 010A.....Learning the Keyboard	1.0
CA 033A.....Word Processing - Course 1	3.0
CA 033B.....Word Processing - Course 2	3.0
CA 036.....Machine Transcription With Word	3.0
CA 037A.....Computer Usage for Workplace	3.0
Plus three units from the following:	
CA 046D.....Introduction to Microsoft PowerPoint	1.0
CA 062B.....An Introduction to Microsoft Excel	1.0
CA 081B.....Introduction to Microsoft Access	1.0
CA 084.....Database: Check It Out!	1.0
CA 045A.....Introductory Microsoft Project	1.0
CA 023.....Distance Learning - How to Succeed	0.5
CA 086.....Web Development with PHP and MySQL	3.0
Total Units	22.0

Office Information Systems - A.S. Degree

The Office Information Systems program is designed to provide computer applications instruction to students who plan to seek employment in an automated business setting. The courses will prepare the student for a position in several areas, as well as increase the student's potential for advancement. Developing computer skills and attitudes necessary to succeed on the job is the program objective.

Core Curriculum Courses (Required)	Units
BUS 078.....Business Communications	3.0
BUS 050.....Administrative Office Procedures	4.0
CA 052*.....PC for Personal and Professional Use.....	0.5
CA 033A.....Word Processing - Course 1	3.0
CA 033B.....Word Processing - Course 2	3.0
CA 036.....Machine Transcription	3.0
CA 037A.....Computer Usage for the Workplace Professional	3.0
CA 046D.....Introduction to Microsoft PowerPoint.....	1.0
CA 062B.....Introduction to Microsoft Excel	1.0
CA 070.....Using MS Windows/Vista	1.0
GRART 063.....Introduction to Adobe Indesign.....	3.0

Plus four units from the following:	Units
CA 031B.....Microsoft Word: Check It Out!	1.0
CA 045A.....Introduction to Microsoft Project	1.0
CA 045B.....Intermediate Microsoft Project.....	2.0
CA 081B.....Introduction to Microsoft Access.....	1.0
CA 071E.....Microsoft Outlook.....	0.5
CA 084.....Oracle: Check It Out!.....	1.0
MGMT 009.....Intro Supervision & Management	0.5
MGMT 013.....Job Stress Management.....	0.5
MGMT 014.....Interviewing Skills	0.5
MGMT 017.....Performance Appraisal	0.5
MGMT 019.....Dealing with Difficult People	0.5

Plus one of the following:	Units
BUS 079.....Human Relations in Business.....	3.0
MGMT 101.....Interpersonal Effectiveness	3.0
Total Program A.S. Degree Requirements:	32.5

*Students should complete CA052 before starting CA033 or other Word Processing Courses. Students who do not have a keyboarding speed of 50 words per minute should complete a speed development course before applying for a degree. NOTE: Knowledge of basic Macintosh skills is recommended prior to taking GRART 063.

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Office Information Systems Certificate of Achievement

The Office Information Systems program is designed to provide computer applications instruction to students who plan to seek employment in an automated business setting. The courses will prepare the student for a position in several areas, as well as increase the student's potential for advancement. Developing computer skills and attitudes necessary to succeed on the job is the program objective. Only courses completed with a grade of C or better may be used to satisfy requirements for a certificate.

Core Curriculum Courses (Required)	Units
BUS 050Administrative Office Procedures	4.0
BUS 078Business Communications	3.0
CA 052*PC for Personal and Professional Use	0.5
CA 033AWord Processing - Course 1	3.0
CA 033BWord Processing - Course 2	3.0
CA 036Machine Transcription.....	3.0
CA 037AComputer Usage for the Workplace Professional	3.0
CA 046DIntroduction to Microsoft PowerPoint.....	1.0
CA 062BIntroduction to Microsoft Excel	1.0
CA 070Using MS Windows/Vista	1.0
CA 081BIntroduction to Microsoft Access.....	1.0

Plus one of the following:	Units
BUS 079Human Relations in Business.....	3.0
CA 034BMicrosoft Word: Indents, Tabs, and Tables.....	0.5
CA 034DMicrosoft Word: Report Formatting Features	0.5
CA 034DMicrosoft Word: Mail Merge.....	0.5
CA 034DMicrosoft Word: New Version Update.....	0.5
CA 045AIntroduction to Microsoft Project.....	1.0
CA 045BIntermediate Microsoft Project.....	2.0
CA 071EMicrosoft Outlook.....	0.5
CA 084Oracle: Check It Out!.....	1.0
MGMT 101Interpersonal Effectiveness	3.0
Total Program Certificate Requirements:.....	26.5

*Students should complete CA 052 before starting CA 033 or other Word Processing Courses. Students who do not have a keyboarding speed of 50 words per minute should complete a speed development course before applying for a certificate.

Office Support Specialist Certificate of Proficiency

The Certificate is designed to provide students with the minimal qualifications needed to work in an office environment. Only courses that have a grade of "C" or better will be used to satisfy requirements for a certificate.

Core Curriculum Courses (Required)	Units
CA 010ALearning the Keyboard	1.0
CA 010CComputer Keyboarding Speed & Accuracy	1.0
CA 013Ten-key Numeric Keypad	1.0
CA 031BMicrosoft Word: Check it Out!.....	1.0
CA 052PC for Personal and Professional Use	0.5
CA 070Using MS Windows/Vista	1.0
CA 062BIntroduction to Microsoft Excel	1.0
CA 071EMicrosoft Outlook.....	0.5
CA 096AInternet Personal and Business I.....	1.0
Total Program Certificate Requirements:.....	8.0

Professional Internet Skills Certificate of Proficiency

The Internet Application Certificate is designed to provide students with the basic skills to work with the Internet, which has become an integral part of many jobs. Only courses that have a grade of "C" or better will be used to satisfy requirements for a certificate.

Core Curriculum Courses (Required)	Units
CA 096AInternet Personal and Business 1.....	1.0
CA 096BInternet Personal and Business 2.....	1.0
CA 097ACreating Web Pages – Course 1	1.0
CA 097BCreating Web Pages – Course 2.....	1.0
CA 097CCreating Web Pages – Course 3.....	1.0
CA 097DCreating Web Pages with XML – Course 1	1.0
CA 096FIntroduction to MS Expression Web	1.0
CA 097ECreating Web Pages with XML – Course 2	1.0
Total Program Certificate Requirements:	8.0

COMPUTER APPLICATIONS (CA)

How to determine placement in computer keyboarding classes

A student should enroll for:

- CA 11 with no previous keyboarding training;
- CA 10A with no previous keyboarding training;
- CA 10C with previous keyboarding training.

010A • LEARNING THE KEYBOARD 1.0 unit

Total Lab 54 hours

Advisory: Eligibility for ENGL 001A and READ 053

This course is designed for anyone who wants to learn the "touch" system of keyboarding on the computer. Proper techniques of keyboarding are emphasized to develop speed and accuracy. May be repeated one time. This course may also be offered via distance learning. Pass/No Pass Only.

010C • COMPUTER KEYBOARDING SPEED AND ACCURACY 1.0 unit

Total Lab 54 hours

Advisory: CA 010A or CA 011

This course is designed for anyone who wants to improve basic keyboarding technique, speed, and accuracy on the computer. There is extensive drill practice and time skill development exercises with personalized instruction based on individual needs. This course may also be offered via distance learning. Pass/No Pass Only.

011 • BEGINNING KEYBOARDING WITH WORD PROCESSING 3.0 units

Total Lecture 36 hours; Total Lab 54 hours

Acceptable for credit: California State University

This course is designed for anyone who wishes to learn the "touch" system of keyboarding and word processing. Students practice on simple business letters, manuscripts, and personal-use correspondence as well as develop proper keyboarding techniques, speed, and accuracy on the computer. This course may be offered via distance learning. Pass/No Pass Option.

013 • TEN-KEY NUMERIC KEYPAD 1.0 unit

Total Lab 54 hours

Advisory: Eligibility for ENGL 001A and READ 053

This course develops entry-level vocational proficiency in the use of 10-key numeric keypad. This course can be taken concurrently with CA 010A or CA 010C. This course may also be offered via distance learning. This course may be repeated one time. Pass/No Pass Only.

023 • DISTANCE LEARNING – HOW TO SUCCEED (NON-ASSOCIATE DEGREE COURSE) 0.5 units

Total Lecture 9 hours

Advisory: CA 010A and CA 070

Be a successful distance learner! In this course students will learn how to register and take a class online. Topics will include: using a browser, email, plug-ins, using a course management system, communicating online, taking a test, and sending work. This course may also be offered via distance learning. Pass/No Pass Only.

031B • MICROSOFT WORD: CHECK IT OUT! 1.0 unit

Total Lecture 18 hours

Advisory: CA 010A, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

The software program Microsoft Word is taught in this course. Students learn the basic features of the software. Specific topics included are: an overview of function key commands, basic input and editing procedures, file handling, printout features, file management, and basic document formatting including letters, memos, and reports. This course may also be offered via distance learning. Pass/No Pass Only.

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033A • WORD PROCESSING - COURSE 1

3.0 units

Total Lecture 54 hours

Advisory: CA 010A or CA 011 and CA 031B, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Word processing is accomplished on a microcomputer using Microsoft Word for Windows. Students develop a working knowledge of a program that offers flexibility in selecting commands, using function keys, as well as an alternative (a "mouse" device) to using the keyboard to select commands. The course includes text-editing, formatting, storage, retrieval, printing, tables, charts, document filing and management, columns, style sheets, spell check and thesaurus. This course may also be offered via distance learning. *Pass/No Pass Option.*

033B • WORD PROCESSING - COURSE 2

3.0 units

Total Lecture 54 hours

Advisory: CA 033A, CA 010A, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Students develop in-depth knowledge of Word to prepare documents. The course includes text-editing, formatting, storage, retrieval, macros, mail-merge, document filing and management, printing, and special features of the program. Advanced software capabilities are covered including review features, themes, sorting, lists, etc. This course may also be offered via distance learning. *Pass/No Pass Option.*

036 • MACHINE TRANSCRIPTION WITH WORD

3.0 units

Total Lecture 54 hours

Advisory: CA 033A, CA 033B, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

This course includes extensive practice in the preparation of business correspondence using computers and transcription machines. There are intensive drills on transcription skills with an emphasis on the quality of production for mailable copy. There is a review of punctuation, spelling, vocabulary building, letter styles, proofreading, and grammar. *Pass/No Pass Option.*

037A • COMPUTER USAGE FOR WORKPLACE PROFESSIONALS

3.0 units

Total Lecture 54 hours

Advisory: CA 010A or CA 011, Eligibility for ENGL 001A and READ 053.

Acceptable for credit: California State University

This course explores the effect of computer technology on office workers and how to use this technology to increase productivity. Information/Word processing is presented using an integrated software package. Roles and duties of administrative support persons and career opportunities in the information/word processing field are explored. The course provides computer hands-on use and emphasis is placed on word processing to enhance office communication. Spreadsheet and database are also explored. *This course may also be offered via distance learning. Pass/No Pass Option.*

045A • INTRODUCTORY MICROSOFT PROJECT

1.0 unit

Total Lecture 18 hours

Advisory: CA 070

Acceptable for credit: California State University

This course covers the basic concepts of project management. Students work with project management tools within Microsoft Project. This enables the use of project data, such as tasks, resources, and time, to manage a project. This course may also be offered via distance learning. *Pass/No Pass Option.*

045B • INTERMEDIATE MICROSOFT PROJECT

2.0 units

Total Lecture 36 hours

Advisory: CA 045A, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

This course covers more advanced concepts of project management and advanced features of Microsoft Project. Students work with the project management tools of Microsoft Project to analyze schedules, work with resource and allocation problems, and monitor and analyze the progress of the project. *This course may also be offered via distance learning. Pass/No Pass Option.*

046D • INTRODUCTION TO MICROSOFT POWERPOINT

1.0 unit

Total Lecture 18 hours

Advisory: CA 010A, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

The software program PowerPoint is taught in this course. Students learn the basic techniques for creation of a presentation such as transitions, animation and formatting of slides. This course may also be offered via distance learning. *Pass/No Pass Option.*

046E • INTERMEDIATE MICROSOFT POWERPOINT

1.0 unit

Total Lecture 18 hours

Advisory: CA 010A, CA 046D, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

This course covers more advanced features of PowerPoint. Students integrate PowerPoint with MS Word, Excel, and web pages. They learn to customize a slide show. *This course may also be offered via distance learning. Pass/No Pass Option.*

051 • HELP DESK AND SUPPORT SPECIALIST

2.0 units

Total Lecture 36 hours

Advisory: CA 010A, CA 070, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

This course covers the concepts of working in the computer user support area (or help desk). Students cover the skills and abilities commonly used in this position and the tasks employers expect an entry-level support staff person to be able to perform. This course may also be offered via distance learning. Pass/No Pass Option.

052 • PC FOR PERSONAL AND PROFESSIONAL USE

0.5 units

Total Lecture 9 hours

Advisory: CA 010A

Build confidence in using a computer and take the mystery away from how a computer works. The course covers: the operating system software and how it works with application software, how the CPU works, the difference between memory and storage, and how the computer records data on a disk. *Pass/No Pass Only.*

062B • AN INTRODUCTION TO MICROSOFT EXCEL

1.0 unit

Total Lecture 18 hours

Advisory: CA 052

Acceptable for credit: California State University

This is an introduction to Excel. The course covers Excel basics, formulas, functions, charts, and formatting. Students create 3-D bar charts, use loan amortization functions, and setup print options. *This course may be offered via distance learning. Pass/No Pass Option.*

063B • INTERMEDIATE MICROSOFT EXCEL

2.0 units

Total Lecture 36 hours

Advisory: CA 062B

Acceptable for credit: California State University

Go to the next professional and personal step using Excel. Learn Excel features that are used in decision-making. Experiment with scenarios, data lookups, goal seek, solver, pivot-table charts and graphs, and more. Create macros to automate Excel tasks. Create buttons in a spreadsheet so others can just click and get the result. This course is designed for students who are computer literate and have some knowledge of Excel. *May be repeated one time. Pass/No Pass Option.*

070 • USING MS WINDOWS

1.0 unit

Total Lecture 18 hours

Advisory: CA 052, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Microsoft Windows has become the standard graphical user interface for the IBM-compatible personal computer. It provides a "graphical environment" for access to application programs and system functions via use of the mouse and icon-oriented commands. This introductory course introduces students to the use of Windows, its application programs and utilities, and explores ways to make their use of the computer more efficient through proper use of the Windows system. *Pass/No Pass Only.*

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071E • MICROSOFT OUTLOOK

0.5 units

Total Lecture 9 hours

Advisory: CA 070, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Students learn the basic features of Microsoft Outlook, a desktop information management system. Students learn how to enter appointments and events, create and manage a daily, weekly, or monthly schedule, track tasks and contacts. Computer literacy skills and keyboarding skills are recommended. Pass/No Pass Only.

081B • INTRODUCTION TO MICROSOFT ACCESS

1.0 unit

Total Lecture 18 hours

Advisory: CA 010A, CA 070, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Take the first professional and personal step using Access, a powerful relational database. Learn to create database tables and enter data, organize, and retrieve data from the tables. Create simple forms to enter data into a database and format reports from the data in the database. This course is for students who are computer literate and who would like to start working with a database. This course may also be offered via distance learning. Pass/No Pass Option.

082B • INTERMEDIATE MICROSOFT ACCESS

2.0 units

Total Lecture 36 hours

Advisory: CA 081B, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Go to the next professional and personal step using Access. Learn Access features to enhance database table design, customize forms and reports, create more complex queries, and manage and secure a database. Create macros to automate database tasks. Learn to use Access with other applications. This course is designed for students who are computer literate and have some knowledge of Access. This course may also be offered via distance learning. Pass/No Pass Option.

084 • DATABASE: CHECK IT OUT!

1.0 unit

Total Lecture 18 hours

Advisory: CA 010A, CA 070, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Students receive an introduction to relational databases concepts and SQL language. They learn how to create a table, enter and modify data and retrieve information from a database. This course introduces students to widely used database systems such as Oracle, Microsoft SQL server and MySQL. This course may also be offered via distance learning. Pass/No Pass Option.

084A • INTRODUCTION TO DATABASE AND SQL

3.0 units

Total Lecture 54 hours

Advisory: CA 070, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

This course covers the concepts of relational databases and SQL query language. Students learn to create tables, insert data, update data and retrieve records in a database. This course introduces students to widely used database systems such as Oracle, Microsoft SQL server and MySQL. This course may also be offered via distance learning. Pass/No Pass Option.

086 • WEB DEVELOPMENT WITH PHP AND MYSQL

3.0 units

Total Lecture 54 hours

Advisory: CA 097A, Eligibility for ENGL 001A and READ 053.

Learn to create dynamic web applications! This course includes web page set up using HTML and Javascript, basic PHP programming elements, MySQL database basics and how to create a database driven web application using PHP and MySQL. This course is cross listed as CIS 086. This course may also be offered via distance learning. Pass/No Pass Option.

088A • INTRODUCTION TO JAVASCRIPT FOR THE WEB

1.0 unit

Total Lecture 18 hours

Advisory: CA 097A, Eligibility for ENGL 001A and READ 053.

This is an introductory course on Javascript programming for the web. Students learn to program interactive web pages using Javascript. This course covers Javascript basics, arrays, objects and web forms. This course may also be offered via distance learning. Pass/No Pass Option.

088B • INTERMEDIATE JAVASCRIPT FOR THE WEB

2.0 unit

Total Lecture 36 hours

Advisory: CA 088A, Eligibility for ENGL 001A and READ 053.

Students learn to create interactive web pages using Javascript. This course builds upon the introductory course to cover Web forms, events, dynamic content, cookies and AJAX. This course may also be offered via distance learning. Pass/No Pass Option.

092A • FUNDAMENTALS OF WEB 2.0 & CLOUD TECHNOLOGIES

2.0 unit

Total Lecture 36 hours

Advisory: CA 10A

This course is designed for anyone who wants to learn more about Web 2.0 and cloud technologies. This course provides an introduction to Web 2.0 applications, such as social networking sites (SNS), video-sharing sites, wikis, blogs and mashups. Students utilize Web 2.0 applications to facilitate interactive information sharing and collaboration via the Internet. Pass/No Pass Option.

096A • INTERNET USE: PERSONAL AND BUSINESS 1

1.0 unit

Total Lecture 18 hours

Advisory: CA 070 or CA 071E, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Students learn techniques in using the Internet in a more productive manner. This includes searching on the Web, downloading programs and Internet security. This course may be offered via distance learning. Pass/No Pass Option.

096B • INTERNET USE: PERSONAL AND BUSINESS 2

1.0 unit

Total Lecture 18 hours

Advisory: CA 070A or CA 071E, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Students will learn how to use the Internet more effectively. This includes going to different websites, using different web browsers, keeping personal information secure and learning more efficient ways to search the web. Students will also learn basic HTML. This course may be offered via distance learning. Pass/No Pass Option.

096F • INTRODUCTION TO MS EXPRESSION WEB

1.0 unit

Total Lecture 18 hours

Advisory: CA 070 and/or CA 097A, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Students learn the basic features of Microsoft Expression: Web, an application to simplify the development and creation of a Web page. This course provides an overview of the software package and teaches students how to create and maintain Web pages. Computer literacy skills and keyboarding skills are recommended. This course may be offered via distance learning. Pass/No Pass Option.

097A • CREATING WEB PAGES - COURSE I

1.0 unit

Total Lecture 18 hours

Advisory: CA 010A, CA 070 and CA 120

Acceptable for credit: California State University

This course provides for the first professional and personal step in creating a Web page. Students will acquire basic HTML formatting commands in a hands-on lab. In addition, they will learn to add color, graphics, lists, and tables to their Web site. The final project is the creation and publication of a personal or business Web page. This course may also be offered via distance learning. Pass/No Pass Option.

097B • CREATING WEB PAGES - COURSE 2

1.0 unit

Total Lecture 18 hours

Advisory: CA 010A, CA 070, CA 097A, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Make web pages look even better and decrease the maintenance time! In this course, create web pages and learn more advanced HTML features in a hands-on lab. Topics include: working with frames, forms, multimedia and cascading style sheets. This course may also be offered via distance learning. Pass/No Pass Option.

COMPUTER APPLICATIONS • COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

BEFORE ENROLLING IN DEGREE APPLICABLE COURSES, IT IS RECOMMENDED THAT YOU COMPLETE ENGL 001A AND READ 053.

097C • CREATING WEB PAGES - COURSE 3

1.0 unit

Total Lecture 18 hours

Advisory: CA 010A, CA 070, CA 097A, CA 097B, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Expand web pages creation skills! In this course create web pages and learn more advanced HTML features in a hands-on lab. Topics include: working with XHTML, JavaScript, and cookies. This course may also be offered via distance learning. *Pass/No Pass Option.*

098A • CREATING WEB PAGES USING XML - COURSE 1

1.0 unit

Total Lecture 18 hours

Advisory: CA 010A, CA 070, CA 097A, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

This course covers the concepts of building a web page using XML. Students work with XML tags that allow them to create a variety of document types. With XML, web pages can be easily customized. XML can handle data content more effectively and it has well-defined standards. This course may also be offered via distance learning. *Pass/No Pass Option.*

098B • WEB PAGES USING XML - COURSE 2

1.0 unit

Total Lecture 18 hours

Advisory: CA 010A, CA 070, CA 098A, Eligibility for ENGL 001A and READ 053

Acceptable for credit: California State University

Expand your knowledge of using XML in web pages! XML is used with the most popular applications – Microsoft Office and Oracle. In this course, create web pages and learn more advanced XML features in a hands-on lab. Topics include: working with cascading and computational style sheets, element groups and the document object model. This course may also be offered via distance learning. *Pass/No Pass Option.*

120 • CA HELP LAB

1.0 unit

Total Lecture 54 hours

Advisory: CA 010A, CA 052 and Concurrent enrollment in CA 033A, 046D, 062B, 081B, 084A, or 097A.

This lab provides additional assistance to students currently enrolled in a Computer Applications class. It is an open entry/open exit course. May be repeated three times. *Pass/No Pass Only.*

COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

DIVISION: Business and Technology
DEPARTMENT: Computer Science and Information Technology
DEAN: Mina Jahan
DIVISION CHAIR: Curtis Pembrook
DEPT CHAIR: Wael Abdeljabbar
PHONE: 408-855-5250
COUNSELING: 408-855-5030

COMPUTER INFORMATION SYSTEMS (CIS)

The Computer Information System (CIS) program is designed to provide students with the knowledge and skills required in the computer information systems area. The program offers students the choices of pursuing an Associate of Science (A.S) Degree in Computer Information Systems, certificates in programming and system administration, transfer program to four year colleges and universities and updating skills in the ever changing technology area.

Student Learning Outcomes:

After taking the appropriate level of CIS classes, students will be able to

- Demonstrate the ability to analyze a problem, and identify and define the computing requirements appropriate to its solution;
- Apply software development techniques that use the correct syntax and semantics of a programming language to write the source code to implement and test/debug a specified design;
- Demonstrate the ability to use current techniques, skills, and tools necessary for computing practice.

Career Options:

- Computer Programmer
- Systems and Operations Analyst
- System Administrator
- Computer Technician
- Customer Technical Support
- Management of Information Systems

Some career options require more than two years of college study.

Computer Information Systems - A.S. Degree

The Computer Information Systems Associate of Science program prepares the student for jobs in business and government as information technology professionals.

Core Curriculum Courses (Required):	Units
CIS 037AIntroduction to C Programming	4.0
CIS 043Software Development With Java	4.0
CIS 044Introduction to Data Structures Using Java	4.0
Plus two or more additional courses from the following electives (at least 8 units):	
CIS 002Visual Basic.NET	4.0
CIS 003Advanced Visual Basic.NET	3.0
CIS 040C++ Programming	4.0
CIS 041Advanced C++ Programming	3.0
CIS 044APerl Programming	4.0
CIS 044BAdvanced Perl Programming	3.0
CIS 065C# .NET Programming	4.0
CIS 066Advanced C# .NET - Web Programming	3.0
CIS 086Web Development with PHP and MySQL	3.0
CIS 045Linux Essentials I	3.0
CIS 046Linux Essentials II (Shell Programming)	3.0
Total Program A.S. Degree Requirements:	20.0 - 22.0