

## Cañada College Instructional Programs Associate Degrees, Certificates, Transfer Programs

Area of Study	Certificate	AA	AS	Transfer
<b>Important:</b> Associate degree and certificate programs have additional college requirements beyond the major. See pages 33-34 for the complete requirements for the associate's degree and certificates.				
ACCOUNTING	•		•	•
ANTHROPOLOGY		•		•
ART		•		•
BIOLOGY Biology with Emphasis in Health Sciences			• •	• •
BUSINESS ADMINISTRATION	•		•	•
BUSINESS/CORPORATE MEETING PLANNER	•			
BUSINESS MANAGEMENT Human Resources Management/Supervision Business Management/Retail (WAFC) Small Business	• • •		• •	• •
COMPUTER BUSINESS OFFICE TECHNOLOGY General Office Administrative Assistant Administrative Support Assistant	• • •		• •	
COMPUTER INFORMATION SCIENCE			•	•
COMPUTER INFORMATION TECHNOLOGY Home Office/Small Business Computer Security	•			
EARLY CHILDHOOD EDUCATION/CHILD DEVELOPMENT Early Childhood Education/Child Development Family Development	• •		•	•
ECONOMICS		•		•
ENGINEERING			•	•
ENGLISH		•		•
ENGLISH AS A SECOND LANGUAGE Academic Competency in English (ACE) Language	•			
FASHION DESIGN Custom Dressmaking/Small Business Oriented Fashion Design Merchandising Technical (Apparel Industry Oriented) Theater Costuming	• • • •		• •	• •
GEOGRAPHY		•		•
HISTORY		•		•
HUMAN SERVICES Community Health Worker Family Development Human Services Promotor Education & Employment	• • • •		•	•

Area of Study	Certificate	AA	AS	Transfer
<b>Important:</b> Associate degree and certificate programs have additional college requirements beyond the major. See pages 33-34 for the complete requirements for the associate's degree and certificates.				
INTERIOR DESIGN Green/Sustainable Design Interior Design Residential & Commercial Kitchen & Bath	• • • •		•	•
LIBERAL ARTS		•		
MATHEMATICS				•
MEDICAL ASSISTING Administrative Medical Assistant Medical Coding Specialist Clinical Medical Assistant Medical Assisting Medical Billing Specialist Medical Transcription	• • • • • •		• • •	
MULTIMEDIA Graphic Design Multimedia Web Design 3D-Animation & Video Game Arts	• • • •	•		•
MUSIC		•		•
NURSING				•
PARALEGAL	•		•	
PHILOSOPHY		•		•
PHYSICAL EDUCATION Fitness Professional Physical Education	•	• •		•
PHYSICAL SCIENCES Chemistry Physics			• •	• •
PHYSICAL THERAPY				•
POLITICAL SCIENCE		•		•
PSYCHOLOGY		•		•
RADIOLOGIC TECHNOLOGY			•	
REAL ESTATE	•			
SOCIAL SCIENCES		•		•
SOCIOLOGY		•		•
SPANISH		•		•
SPEECH		•		•
THEATER ARTS		•		•
UNIVERSITY STUDIES		•		

## ACCOUNTING

### Certificate of Completion-Entry Level Bookkeeper

#### Certificate of Proficiency-Accounting

#### Associate in Science Degree

#### Transfer Program

The Business Department offers a transfer curriculum to a four-year university, an AS Degree, and a certificate program designed to give the students both formal and practical training in accounting. The accounting AS degree and certificate programs are designed to give students enough practical experience so that they can secure a position in either the public, governmental, or private accounting sector when they have completed the recommended 25.5 - 29.5 units. Courses specifically required for the student's major must be evaluated by a letter grade, not by the credit (CR) grade.

The Certificate of Completion is designed for those individuals that are interested in job opportunities at the entry level in bookkeeping and or computerized accounting data entry. Those students that are interested in becoming professional bookkeepers may apply some of the course work in this certificate to the Certificate of Proficiency in Accounting and the accounting A.S. degree.

The demand for entry level bookkeepers and accounting data entry personnel continues to remain high. Entry level positions pay between \$15 and \$25 per hour depending upon experience.

### CERTIFICATE OF COMPLETION – ENTRY LEVEL BOOKKEEPER

#### Core Requirements

#### Complete Core Courses, 10-12 units

	<b>UNITS</b>
ACTG. 100 Accounting Procedures	3
ACTG. 180 Payroll and Business Taxes	1.5
ACTG. 190 QuickBooks and QuickBooks Pro for the Paraprofessional I	1.5
ACTG. 192 QuickBooks and QuickBooks Pro for the Paraprofessional II	1.5
CBOT 435 Spreadsheets	1-3
CBOT 448 Using Microsoft Windows	1.5
<b>Certificate Unit Requirements Total</b>	<b>10-12+</b>

### CERTIFICATE OF PROFICIENCY - ACCOUNTING

#### Core and Selective Requirements

#### Complete Core Courses, 19.5–23.5 units

	<b>UNITS</b>
ACTG 121 Financial Accounting	3-5
ACTG 131 Managerial Accounting	3-5
ACTG 180 Payroll & Business Taxes	1.5
ACTG 190 Quickbooks and Quickbooks Pro for the Paraprofessional I	1.5
ACTG 192 Quickbooks and Quickbooks Pro for the Paraprofessional II	1.5
BUS. 100 Survey of Business	3
CBOT 430 Computer Applications, Part I	1.5
CBOT 431 Computer Applications, Part II	1.5
CBOT 435 Spreadsheets	3

#### Selective courses: choose a minimum of 6 units from the following:

ACTG 100 Accounting Procedures	3
ACTG 133 Intro. To Spreadsheets for Managerial Accounting	1
ACTG 171 Individual Income Tax Procedures	3
ACTG 180 Payroll and Business Taxes	1.5
ACTG 672 Cooperative Education Internship	1-6
BUS. 101 Human Relations in Business	3
BUS. 103 Introduction to Business Information Systems	3
BUS. 201 Business Law	3
CBOT 415 Beginning Computer Keyboarding	1.5
CBOT 472 Introduction to Word for Windows	1.5
CBOT 474 Intermediate Word for Windows	1.5

**Certificate Unit Requirements Total** **25.5-29.5+**

### ASSOCIATE IN SCIENCE - ACCOUNTING

#### Core and Selective Requirements

Complete Core & Selective Courses, 25.5–29.5 units, listed under the Certificate of Proficiency-Accounting.

**Associate Degree Unit Requirements Total** **25.5-29.5\***

### TRANSFER PROGRAM - ACCOUNTING

Cañada College offers lower division coursework required for transfer in the area of Accounting/Business Administration. Usually an Accounting program of study is listed under Business Administration. Students should use PROJECT ASSIST ([www.assist.org](http://www.assist.org)) to research lower division major requirements at the transfer destination(s) of their choice. Also, work with a Counselor/Advisor to determine appropriate transfer coursework.

+ meet Certificate Program requirements listed on page 44.

\* and required General Education coursework and electives as needed to meet the minimum 60 units required for the Associate degree.

## ANTHROPOLOGY

### Associate in Arts Degree Transfer Program

Anthropology is the study of peoples of the world from prehistoric to contemporary times. It is concerned with the variability of human populations and their biocultural history. Physical Anthropology concentrates on various biological characteristics, and Cultural Anthropology focuses on socially learned traits.

### ASSOCIATE IN ARTS - ANTHROPOLOGY

#### Core and Selective Requirements

Complete Core Courses, 6 units

	UNITS
ANTH 110 Cultural Anthropology	3
ANTH 125 Physical Anthropology	3

Selective courses: choose a minimum of 12 units from the following:

	UNITS
ANTH 105 Peoples and Cultures of the World	3
ANTH 360 Indians of North America	3
ANTH 370 Olmec, Maya, Aztec People & Cultures of Mexico & Central America	3
BIOL 110 Principles of Biology	4
<i>or BIOL 130 Human Biology</i>	3
ECON 100 Principles of Macro Economics	3
GEOG 100 Physical Environment	3
GEOL 100 Survey of Geology	3
MATH 200 Elementary Probability & Statistics	4
PALN 110 Ancient Life & Past Environments	3

Associate Degree Unit Requirements Total **18\***

### TRANSFER PROGRAM - ANTHROPOLOGY

Cañada College offers lower division coursework required for transfer in the area of Anthropology. Students should use PROJECT ASSIST ([www.assist.org](http://www.assist.org)) to research lower division major requirements at the transfer destination(s) of their choice. Also, work with a Counselor/Advisor to determine appropriate transfer coursework.

*\* and required General Education coursework and electives as needed to meet the minimum 60 units required for the Associate degree.*

## ART

### Associate in Arts Degree Transfer Program

The Art Department at Cañada College affords a unique experience to the serious student seeking a sound foundation in aesthetics and skill development. The faculty is composed of artist-teachers whose personal sensibilities range from the Classical to the Expressionist. The program has been designed to offer a continuity of study through structured courses based on the life-time experiences of each of the artist-teachers. The ultimate goal of the program is to support each student in the search for a personal form and the development of capabilities by which this form can be manifested.

### ASSOCIATE IN ARTS - ART

#### Core and Selective Requirements

Complete Core Courses, 9 units

	UNITS
ART 101 History of Art I	3
ART 102 History of Art II	3
ART 103 History of Art III	3

Selective courses: choose a minimum of 9 units from the following:

ART 201 Form and Composition I	3
ART 204 Drawing I	3
ART 221 Painting I	3
Any other ART 200/300 series courses	6-12

Associate Degree Unit Requirements Total **18\***

### TRANSFER PROGRAM - ART

Cañada College offers lower division coursework required for transfer in the area of Art. Students should use PROJECT ASSIST ([www.assist.org](http://www.assist.org)) to research lower division major requirements at the transfer destination(s) of their choice. Also, work with a Counselor/Advisor to determine appropriate transfer coursework.

*For Multimedia certificates and degrees see MULTIMEDIA section.*

*\* and required General Education coursework and electives as needed to meet the minimum 60 units required for the Associate degree.*

## BIOLOGY

**Associate in Science Degree - Biology**

Associate in Science Degree - Biology with emphasis in Health Sciences

**Transfer Program**

**Professional School Preparation: Pre-Dental, Pre-Medicine, Pre-Pharmacy, Pre-Veterinary, Pre-Optometry**

A major in Biological Sciences is a preparation for advanced academic work, for careers in civil service, industry, or teaching; as a background for professional training in such fields as biological science education, biotechnology, nursing, public health, environmental health, pre-medicine and all related areas of biology. Natural resources are among the most important assets of man and the wise use of renewable resources is basic to development in the economic, social and political areas. The basic pre-professional requirements necessary to transfer are offered in the Biological Sciences, Physical Sciences, and Mathematics Departments.

**ASSOCIATE IN SCIENCE - BIOLOGY**

**Core and Selective Requirements**

Complete Core Courses, 18 units:

	UNITS
BIOL 225 Biology of Organisms	5
BIOL 230 Introduction to Cell Biology	4
CHEM 210 General Chemistry I	5
PHYS 210 General Physics I	4
<i>or PHYS 250 Physics with Calculus I</i>	

Selective courses: choose a minimum of 12 units from the following:

BIOL 103 Native Plants and Wildflowers	3
BIOL 130 Human Biology	3
BIOL 240 General Microbiology	4
BIOL 250 Human Anatomy	4
BIOL 260 Human Physiology	5
BIOL 310 Nutrition	3
CHEM 220 General Chemistry II	5
MATH 200 Elementary Probability and Statistics	4
MATH 241/242 Applied Calculus I/II	5/5
<i>or MATH 251/252/253 Analytical Geometry &amp; Calculus I/II/III</i>	<i>5/5/5</i>
PHYS 220 General Physics II	4
<i>or PHYS 260/270 Physics with Calculus II/III</i>	<i>4/4</i>

**Associate Degree Unit Requirements Total 30\***

**ASSOCIATE IN SCIENCE DEGREE-BIOLOGY WITH EMPHASIS IN HEALTH SCIENCES**

**Core and Selective Requirements**

Complete Core Courses, 16-18 units

	UNITS
BIOL 110 Principles of Biology	4
<i>One of the following courses:</i>	
CHEM 192 Elementary Chemistry	4-5
<i>or CHEM 210 General Chemistry I</i>	
<i>or CHEM 410 Chemistry for Health Sciences</i>	
<i>And two of the following courses:</i>	
BIOL 250 Human Anatomy <sup>□^</sup>	4
BIOL 240 General Microbiology <sup>^•</sup>	4
BIOL 260 Human Physiology <sup>^•</sup>	5

- generally required for Radiologic Technology Program
- ^generally required for Nursing Programs
- generally required for Respiratory Therapy Programs

Selective courses: choose a minimum of 10 units from the following:

ANTH 110 Cultural Anthropology	3
BIOL 225 Biology of Organisms	5
BIOL 230 Introduction to Cell Biology	4
BIOL 240 General Microbiology	4
BIOL 250 Human Anatomy	4
BIOL 260 Human Physiology	5
BIOL 310 Nutrition	3
CHEM 220 General Chemistry II	5
FITN 250 Personal Trainer Preparation: Anatomy & Physiology	3
HSCI 100 General Health Science	2-3
HSCI 115 Intro to Health Care and the Health Professions	3
HSCI 430 First Aid	.5
LCTR 151 Allied Health Science Vocabulary	1
MATH 200 Elementary Probability and Statistics	4
MATH 241/242 Applied Calculus I/II	5/5
Math 251 Analytical Geometry and Calculus I	5
PHYS 210/220 General Physics I/II	4/4
PSYC 100 General Psychology	3
PSYC 201 Child Development	3

**Associate Degree Unit Requirements Total 26-28\***

**TRANSFER PROGRAM - BIOLOGY**

Cañada College offers lower division coursework required for transfer in the area of Biological Sciences. Students should use PROJECT ASSIST ([www.assist.org](http://www.assist.org)) to research lower division major requirements at the transfer destination(s) of their choice. Also, work with a Counselor/Advisor to determine appropriate transfer coursework.

**PROFESSIONAL SCHOOL PREPARATION**

(Pre-Dentistry, Pre-Medicine, Pre-Pharmacy, Pre-Veterinary, Pre-Optometry)

Many students are interested in careers in the health sciences and wonder what they should major in at Cañada College. Students often have the misconception that "pre-med" is an academic major and it is not. Students should major in what they enjoy as long as they take the appropriate courses required for professional school (medical, dental, veterinary) admission. Some students choose majors like biological science, genetics, or microbiology, where there is a great deal of overlap between courses required for their major and the professional school undergraduate requirements. Others choose majors not directly related to their career objective, such as English, psychology, anthropology, and use their elective units to meet the professional school requirements. Professional schools, especially medical schools, are looking for well-rounded students who have taken courses in the humanities and social sciences, and who have participated in activities and community work. More information can be found at numerous websites (i.e., [www.aamc.org](http://www.aamc.org)) and by speaking with a Counselor/Advisor.

Each professional school has a minimum number of prerequisite courses to be taken at the undergraduate level. Requirements vary from school to school. Many prerequisite courses may be taken at Cañada College.

\* and required General Education coursework and electives as needed to meet the minimum 60 units required for the Associate degree.

## BUSINESS ADMINISTRATION

**Certificate of Proficiency - Business Administration**  
**Associate in Science Degree - Business Administration**  
**Transfer Program - Business Administration**

The Business Department offers a transfer program, an AS Degree. The transfer program listed is the same for all business disciplines at four-year colleges and universities. The AS Degree is designed to help a student develop a general business awareness for the world of work, a four-year college, or university. Courses specifically required for the student's major transfer core requirements must be evaluated by a letter grade, not by the credit (CR) grade.

### CERTIFICATE OF PROFICIENCY - BUSINESS ADMINISTRATION

*Core and Selective Requirements*

**Complete Core Courses, 25-28 units**

	<b>UNITS</b>
ACTG 121 Financial Accounting	4-5
BUS. 100 Survey of Business	3
BUS. 101 Human Relations in Business	3
<i>or MGMT 204 Managing Employees Effectively</i>	3
BUS. 103 Introduction to Business Information Systems	3
BUS. 108 Business Writing & Presentation Methods	3
BUS. 115 Business Mathematics	3
<i>or MATH 120 Intermediate Algebra</i>	5
BUS. 201 Business Law	3
MGMT 215 Management of Human Resources	3

**Selectives courses: choose a minimum of 6 units from the following:**

May be any Accounting or Business or  
 Cooperative Education course 6

**Certificate Unit Requirements Total 31-34+**

### ASSOCIATE IN SCIENCE - BUSINESS ADMINISTRATION

*Core and Selective Requirements*

**Complete Core Courses, 21-25 units**

	<b>UNITS</b>
ACTG 121 Financial Accounting	4-5
ACTG 131 Managerial Accounting	4-5
ECON 100 Principles of Macro Economics	3
ECON 102 Principles of Micro Economics	3
MATH 125 Elementary Finite Mathematics	3
<i>or MATH 241 Applied Calculus I</i>	5
<i>or MATH 251 Analytical Geometry &amp; Calculus I</i>	5
MATH 200 Elementary Probability & Statistics	4

**Selectives courses: choose a minimum of 6 units from the following:**

BUS. 100 Survey of Business	3
BUS. 103 Introduction to Business Information Systems	3
BUS. 201 Business Law	3
CBOT 435 Spreadsheets	3
CIS 118/119 Intro to Object-Oriented Program Design/Lab I	3/1
CIS 250/251 Programming Methods I: C++/Lab I: C++	3/1
MATH 242 Applied Calculus II	5
MATH 252 Analytical Geometry & Calculus II	5
SPCH 100 Public Speaking	3

**Associate Degree Unit Requirements Total 27-31\***

### TRANSFER PROGRAM - BUSINESS ADMINISTRATION

Cañada College offers lower division coursework required for transfer in the area of Business Administration. Students should use PROJECT ASSIST ([www.assist.org](http://www.assist.org)) to research lower division major requirements at the transfer destination(s) of their choice. Also, work with a Counselor/Advisor to determine appropriate transfer coursework.

+ meet Certificate Program requirements listed on page 44.

\* and required General Education coursework and electives as needed to meet the minimum 60 units required for the Associate degree.



## BUSINESS/CORPORATE MEETING PLANNER

### Certificate of Completion

The Corporate Meeting Planner certificate is designed for the person in a corporate setting who is responsible for organizing and planning travel and meeting arrangements.

### CERTIFICATE OF COMPLETION- BUSINESS/CORPORATE MEETING PLANNER

#### Core and Selective Requirements

Complete Core Courses, 14.5 units

	<b>UNITS</b>
BUS. 128 Corporate Meeting and Event Planning	3
BUS. 419 On-site Management	1
CBOT 435 Spreadsheets	3
CBOT 436 Database Management	3
CBOT 472 Introduction to Word for Windows	1.5
CBOT 474 Intermediate Word for Windows	1.5
CBOT 480 Using the Internet, Part I	1.5
<b>Certificate Unit Requirements Total</b>	<b>14.5+</b>

+ meet Certificate Program requirements listed on page 44.

## BUSINESS MANAGEMENT

Certificate of Completion- Human Resources Management/  
Supervision

Certificate of Proficiency - Business Management/Retail (WAFC)

Certificate of Proficiency - Small Business

Associate in Science - Business Management/Retail (WAFC)

Associate in Science - Small Business

Transfer Program - Business Management/Retail (WAFC)

The Business Department prepares students for both entry-level positions and management positions in retail. Students are prepared to plan, organize, direct, and manage employees in a variety of settings.

The Business Department also offers both an A.S. Degree and a Certificate program for those students who wish to become a new business owner and or update their skills as a current business owner. The A.S. Degree and Certificate program are designed to assist students in the development of a small business.

### CERTIFICATE OF COMPLETION- HUMAN RESOURCES MANAGEMENT/SUPERVISION

#### Core and Selective Requirements

Complete Core Courses, 10 units

	<b>UNITS</b>
MGMT 204 Managing Employees Effectively	3
MGMT 215 Management of Human Resources	3
MGMT 220 Organizational Behavior	3
MGMT 222 Financial Budgeting & Control	1
<b>Certificate Unit Requirements Total</b>	<b>10+</b>

### CERTIFICATE OF PROFICIENCY - BUSINESS MANAGEMENT/RETAIL (WAFC)

#### Core and Selective Requirements

Complete Core Courses, 30 units

	<b>UNITS</b>
ACTG 100 Accounting Procedures	3
BUS. 103 Introduction to Business Information Systems	3
BUS. 108 Business Writing and Presentation Methods	3
BUS. 115 Business Mathematics	3
BUS. 180 Marketing	3
BUS. 186 Retail Management	3
MGMT 100 Introduction to Business Management	3
MGMT 204 Managing Employees Effectively or BUS. 101 Human Relations in Business	3
MGMT 215 Management of Human Resources	3
SPCH 120 Interpersonal Communication	3
<b>Certificate Unit Requirements Total</b>	<b>30+</b>

### CERTIFICATE OF PROFICIENCY - SMALL BUSINESS

#### Core and Selective Requirements

Complete Core Courses, 26.5 units

	<b>UNITS</b>
ACTG 100 Accounting Procedures	3
ACTG 194 QuickBooks® & QuickBooks Pro® for the Small Business Person I	1
ACTG 196 QuickBooks® & QuickBooks Pro® for the Small Business Person II	1

BUS. 101 Human Relations in Business	3
BUS. 108 Business Writing & Presentation Methods	3
BUS. 150 Small Business Management	3
BUS. 395 Getting Started in Business	1
BUS. 396 Developing a Business Plan	1
BUS. 397 Developing Tools to Create a Marketing Plan	1
BUS. 399 Laws Governing Small Business Owners	1
BUS. 399 Managing a Business	1
CBOT 430 Computer Applications, Part I	1.5
CBOT 431 Computer Applications, Part II	1.5
CBOT 435 Spreadsheet	3
CBOT 480 Using the Internet, Part I	1.5

Selective courses: choose a minimum of 1 unit from the following:

BUS. 398 Small Business Resource Lab	1
COOP 670 Cooperative Education/Work Experience	1
COOP 672 Cooperative Education/Internship	1
<b>Certificate Unit Requirements Total</b>	<b>27.5+</b>

### ASSOCIATE IN SCIENCE - BUSINESS MANAGEMENT/ RETAIL (WAFC)

Complete Core Courses, 30 units, listed under the Certificate of Proficiency-Business Management/Retail.

Associate Degree Unit Requirements Total 30\*

### ASSOCIATE IN SCIENCE - SMALL BUSINESS

Core and Selective Requirements

Complete Core Courses, 27.5 units, listed under the Certificate of Proficiency-Small Business.

Associate Degree Unit Requirements Total 27.5\*

### TRANSFER PROGRAM - BUSINESS MANAGEMENT/RETAIL (WAFC)

Cañada College offers lower division coursework required for transfer in the area of Business Management. Students should use PROJECT ASSIST ([www.assist.org](http://www.assist.org)) to research lower division major requirements at the transfer destination(s) of their choice. Also, work with a Counselor/Advisor to determine appropriate transfer coursework.

+ meet Certificate Program requirements listed on page 44.

\* and required General Education coursework and electives as needed to meet the minimum 60 units required for the Associate degree.

## COMPUTER BUSINESS OFFICE TECHNOLOGY

Certificate of Completion - General Office

Certificate of Proficiency - Administrative Assistant

Certificate of Proficiency - Administrative Support Assistant

Associate in Science Degree - Administrative Assistant

Associate in Science Degree - Administrative Support Assistant

### CERTIFICATE OF COMPLETION - GENERAL OFFICE

Core and Selective Requirements

Complete Core Courses, 12 units

	UNITS
BUS. 101 Human Relations in Business	3
CBOT 415 Computer Keyboarding	1.5
or CBOT 417 Skill Building	1.5
CBOT 430 Computer Applications, Part I	1.5
CBOT 431 Computer Applications, Part II	1.5
CBOT 439 Managing Business Document	1.5
CBOT 448 Using Microsoft Windows	1.5
CBOT 480 Using the Internet, Part I	1.5
<b>Certificate Unit Requirements Total</b>	<b>12+</b>

### CERTIFICATE OF PROFICIENCY - ADMINISTRATIVE ASSISTANT

Core and Selective Requirements

Complete Core Courses, 23.5 units

	UNITS
BUS. 101 Human Relations in Business	3
BUS. 108 Business Writing and Presentation Methods	3
CBOT 435 Spreadsheets	3
CBOT 436 Database Management	3
CBOT 457 Presentation Software: PowerPoint	1.5
CBOT 458 Advanced Presentation Software: PowerPoint	1.5
CBOT 472 Introduction to Word for Windows	1.5
CBOT 474 Intermediate Word for Windows	1.5
CBOT 475 Using Outlook	1.5
CBOT 476 Adobe Acrobat	1.5
CBOT 478 Integrating Microsoft Office	1.5
COOP 670 Cooperative Education/Work Experience	
or COOP 672 Cooperative Education: Internship	1

Selective courses: choose a minimum of 6 units from the following:

ACTG 100 Accounting Procedures	3
ACTG 194 QuickBooks and QuickBooks Pro for the Small Business Person I	1
BUS. 100 Survey in Business	3
BUS. 115 Business Mathematics	3
BUS. 128 Corporate Meeting and Event Planning	3
BUS. 201 Business Law	3
BUS. 419 Onsite Management	1
CBOT 482 Using the Internet, Part 2	1.5

**Certificate Unit Requirements Total 29.5+**

**CERTIFICATE OF PROFICIENCY – ADMINISTRATIVE SUPPORT ASSISTANT***Core and Selective Requirements*

Complete Core Courses, 17.5 units

	<b>UNITS</b>
BUS. 101 Human Relations in Business	3
BUS. 108 Business Writing and Presentation Methods	3
CBOT 430 Computer Applications, Part I	1.5
CBOT 431 Computer Applications, Part II	1.5
CBOT 439 Managing Business Documents	1.5
CBOT 448 Using Microsoft Windows	1.5
CBOT 472 Introduction to Word for Windows	1.5
CBOT 474 Intermediate Word for Windows	1.5
CBOT 480 Using the Internet, Part I	1.5
COOP 670 Cooperative Education/Work Experience or COOP 672 Cooperative Education: Internship	1

Selective courses: choose a minimum of 6 units from the following:

BUS. 100 Survey in Business	3
BUS. 115 Business Mathematics	3
BUS. 201 Business Law	3
CBOT 415 Beginning Computer Keyboarding or CBOT 417 Skill Building	1.5
CBOT 435 Spreadsheets	3
CBOT 436 Database Management	3
CBOT 457 Presentation Software: PowerPoint	1.5
CBOT 458 Advanced Presentation Software: PowerPoint	1.5
CBOT 475 Using Outlook	1.5
CBOT 476 Adobe Acrobat	1.5
CBOT 482 Using the Internet, Part II	1.5

Certificate Unit Requirements Total **23.5\*****ASSOCIATE IN SCIENCE – ADMINISTRATIVE ASSISTANT***Core and Selective Requirements*

Complete Core &amp; Selective Courses, 29.5 units, listed under the Certificate of Proficiency-Administrative Assistant.

Associate Degree Unit Requirements Total **29.5\*****ASSOCIATE IN SCIENCE – ADMINISTRATIVE SUPPORT ASSISTANT***Core and Selective Requirements*

Complete Core &amp; Selective Courses, 23.5 units, listed under the Certificate of Proficiency-Administrative Support Assistant.

Associate Degree Unit Requirements Total **23.5\***

+ meet Certificate Program requirements listed on page 44.

\* and required General Education coursework and electives as needed to meet the minimum 60 units required for the Associate degree.

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**COMPUTER INFORMATION SCIENCE**

## Associate in Science - Computer Information Science

## Transfer Program - Computer Information Science

The Computer Information Science Program offers an AS degree and a parallel transfer program. Students who already possess a degree will gain substantial skills in computer sciences through completion of the Core Courses. The major for the AS degree in Computer Information Science consists of 19-21 units of Required Core Courses and 12 units of electives chosen from the list of Supporting Subject Courses which complete the major. Other electives for the AS degree may be chosen freely. To earn the AS degree, students also must complete general education and other graduation requirements.

**ASSOCIATE IN SCIENCE - COMPUTER INFORMATION SCIENCE***Core & Selective Requirements*

Complete Core Courses, 19-21 units

Choose either the C++ OR the JAVA path below.

**C++ Path**

	<b>UNITS</b>
CIS 118/119 Introduction to Object-Oriented Program Design/Lab I	3/1
CIS 250/251 Programming Methods I: C++/Lab I: C++	3/1
CIS 252/253 Programming Methods II: C++/Lab II C++	3/1
<i>Two of the following courses:</i>	
MATH 200 Elementary Probability and Statistics	4
MATH 241 Applied Calculus I	5
MATH 251 Analytical Geometry & Calculus I	5
MATH 268 Discrete Mathematics	4

**Java Path**

	<b>UNITS</b>
CIS 118/119 Introduction to Object-Oriented Program Design/Lab I	3/1
CIS 284/285 Programming Methods I: Java/Lab I: Java	3/1
CIS 286/287 Programming Methods II: Java/Lab II: Java	3/1
<i>Two of the following courses:</i>	
MATH 200 Elementary Probability and Statistics	4
MATH 251 Analytical Geometry & Calculus I	5
MATH 268 Discrete Mathematics	4

Selective courses: in addition to taking the courses for one of the paths listed above, choose a minimum of 12 units from the following:

CHEM 210/220 General Chemistry I/II	5/5
ENGR 210 Engineering Graphics	4
ENGR 260/261 Circuits and Devices/Lab	3/1
ENGR 270 Materials Science	3
MATH 200 Elementary Probability and Statistics	4
MATH 219 Pre-Calculus College Algebra/Trigonometry	5
MATH 241/242 Applied Calculus I/II	5/5
MATH 251/252/253 Analytical Geometry & Calculus I/II/III	5/5/5
MATH 270 Linear Algebra	3
MATH 275 Ordinary Differential Equations	3
PHIL 103 Critical Thinking	3
PHYS 210/220 General Physics I/II	4/4
or PHYS 250/260/270 Physics with Calculus I/II/III	4/4/4

Associate Degree Unit Requirements Total **31-33\***

**TRANSFER PROGRAM - COMPUTER INFORMATION SCIENCE**

Cañada College offers lower division coursework required for transfer in the areas related to Computer Science. In this regard, it is suggested that students research Computer Information Systems, Management Information Systems, Computer Science, and Computer Engineering programs. Students should use PROJECT ASSIST (www.assist.org) to research lower division major requirements at the transfer destination(s) of their choice. Also, work with a Counselor/Advisor to determine appropriate transfer coursework.

*\* and required General Education coursework and electives as needed to meet the minimum 60 units required for the Associate degree.*

**COMPUTER INFORMATION TECHNOLOGY**

**Certificate of Completion – Home Office/Small Business Computer Security**

**CERTIFICATE OF COMPLETION – HOME OFFICE/SMALL BUSINESS COMPUTER SECURITY**

*Core Requirements*

**Complete Core Courses, 15 units**

	<b>UNITS</b>
CIT 422 Help Desk	1.5
CIT 450 PC Maintenance & System Upgrades, Part I	3
CIT 453 Troubleshooting Systems	1.5
CIT 467 Internet/Network Security	3
CIT 492 Networking Essentials	3
CIT 494 Supporting Windows XP Professional	3

**Certificate Unit Requirements Total 15\***

*\* and required General Education coursework and electives as needed to meet the minimum 60 units required for the Associate degree.*

