

“C” Majors

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CHEMISTRY

CHILD DEVELOPMENT

CINEMA

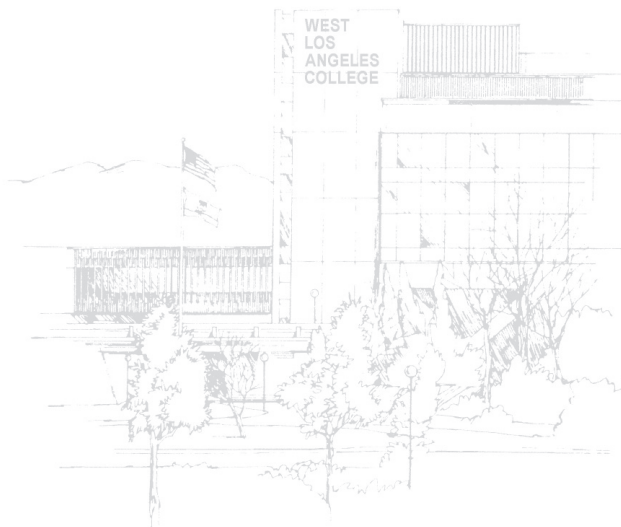
CNA/GERIATRIC CARE TECHNICIAN

COMPUTER APPLICATIONS AND OFFICE TECHNOLOGIES

COMPUTER SCIENCE INFORMATION TECHNOLOGY

The following section details the required curriculum for every degree and certificate program offered at the college. Students must complete all course requirements to petition for a skill certificate or state-approved Certificate of Achievement. In order to be eligible for an Associate degree, students must fulfill all major courses, all West general education requirements (Plan A or Plan B), and all other graduation requirements for a total of at least 60 units. Students should refer to “Graduation Requirements” (in the “Academics” section of this catalog) for additional information. Students are also encouraged to seek assistance from counselors and faculty.

Transfer students should consult the Transfer Center or the Counseling Office for major preparation and general education requirements for the particular transfer institution of their choice. Transfer students who want to obtain an Associate degree may select one of the Liberal Arts and Science degrees which require completion of the West, CSU, or IGETC general education core and at least 18 units of coursework in an approved area of emphasis (see Liberal Arts & Science Section for details).



BUSINESS ADMINISTRATION

ASSOCIATE DEGREES

(ALSO SEE MANAGEMENT - SMALL BUSINESS)

The Associate of Arts degree in Business Administration includes coursework that aligns with specific lower-division major requirements for Business Administration and related majors at various universities within the University of California (UC) and California State University (CSU) systems.

Students are encouraged to visit the Transfer Center for complete information regarding transfer requirements for the institution of their choice. Students interested in transfer are also encouraged to consult the Counseling Office for individualized educational planning.

Career opportunities in Business Administration are available for multiple professions including accounting managers, stockbrokers, financial consultants, insurance brokers, marketing managers and computer specialists. In addition, a prospective professor of business may get a start in the associate and baccalaureate programs in business administration.

ASSOCIATE OF ARTS DEGREE

MAJOR CODE 0505.00

(26 UNITS, PLAN B) + All other West requirements for Associate Degree

REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
ACCTG 2	Introductory Accounting II	5
CO SCI 901	Introduction to Computers and Their Use	3
ECON 1	Principles of Economics I	3
ECON 2	Principles of Economics II	3
LAW 1	Business Law I	3
MATH 227*	Statistics	4
TOTAL UNITS		26

* Higher level Mathematics coursework may be substituted to meet transfer requirements at varying four-year institutions.

CHEMISTRY

ASSOCIATE DEGREES

The Associate of Arts degree in Chemistry includes coursework that aligns with specific lower-division major requirements for the Chemistry major at various universities within the University of California (UC) and California State University (CSU) systems. Additional coursework in Math and Physics is required at some UC and CSU campuses.

Students are encouraged to visit the Transfer Center for complete information regarding transfer requirements for the institution of their choice. Students interested in transfer are also encouraged to consult the Counseling Office for individualized educational planning.

The Associate Degree in Chemistry is designed to provide students with a strong basic foundation for baccalaureate study in Chemistry.

ASSOCIATE OF ARTS DEGREE

MAJOR CODE 1905.00

(45 UNITS, PLAN B) + All other West requirements for Associate Degree

REQUIRED COURSES		UNITS
CHEM 101	General Chemistry I	5
CHEM 102	General Chemistry II	5
CHEM 211	Organic Chemistry for Science Majors I	5
CHEM 212	Organic Chemistry for Science Majors II	5
MATH 261	Calculus I	5
MATH 262	Calculus II	5
MATH 263	Calculus III	5
PHYSICS 37	Physics for Engineers and Scientists I	5
PHYSICS 38	Physics for Engineers and Scientists II	5
TOTAL UNITS		45

CHILD DEVELOPMENT

The Child Development program is designed for students who are interested in working with young children. The program centers on continuing experiences in a wide variety of pre-school settings and will also meet the needs of persons who are currently employed in pre-school centers, but who want to increase their professional skills. Young children are society's most valuable resource, and they must be nurtured with this judgment clearly in view. Students in the Child Development program strive to gain a deep understanding of the total development and potential of young children. The field is expanding, with excellent job opportunities existing throughout the nation.

MAJOR REQUIREMENTS

The Child Development Program serves those entering and currently employed in the rapidly expanding field of Early Childhood Education. Students will be prepared to teach in pre-school programs, including private schools, children's centers, Head Start programs, parent cooperatives and parochial schools, as well as serving as educational aides in elementary schools. The program also benefits anyone interested in understanding children, their development, and their behavior.

All students must make an appointment for advisement in the Child Development Office (Science 108). Applications and a student profile record must be on file. Students will be advised to take a Math and an English assessment test.

THERE ARE RESIDENCY REQUIREMENTS AT WEST LOS ANGELES COLLEGE FOR THE AWARDING OF SKILLS CERTIFICATES, CERTIFICATE OF ACHIEVEMENT, AND ASSOCIATE OF ARTS DEGREE IN CHILD DEVELOPMENT: Any student who has completed Child Development courses at colleges within the Los Angeles Community College District is eligible for a Child Development Skills Certificate, Certificate of Achievement, or an Associate of Arts Degree in Child Development at West Los Angeles College. However, there is a 12-unit residency requirement of coursework that must be completed at West Los Angeles College. These 12 units of coursework do not have to be in the field of Child Development.

Students who have taken courses outside the Los Angeles Community College District and are applying for one of the certificates or the degree must not only meet the 12-unit residency requirement, but must also meet the following additional requirements:

Students who are applying for a Skills Award, a Certificate of Achievement, or an Associate of Arts Degree in Child Development must complete a majority of the required coursework within the Los Angeles Community College District. Courses taken outside of the Los Angeles Community College District must be evaluated by the Department Chairperson.

The format for participating in the child Development program is as follows:

ASSOCIATE DEGREES

The Associate of Arts degree in Child Development is primarily designed for vocational education and workforce training/development. Although the curriculum is not specifically aligned with course requirements for transfer to a four-year college or university, the program offers a variety of courses that fulfill some lower-division requirements in Child Development at local four-year institutions.

Students interested in transferring to a four-year college or university with a major in Child Development may consider the Associate of Arts degree in Liberal Arts and Sciences with an emphasis in Behavioral and Social Sciences. Students should consult the Transfer Center or the Counseling Office for major preparation and general education requirements of the particular transfer institution of their choice.

ASSOCIATE OF ARTS DEGREE

MAJOR CODE 1305.00

(40 UNITS, PLAN B)+ All other West requirements for Associate Degree

REQUIRED COURSES		UNITS
CD 1	Child Growth and Development	3
CD 2	Early Childhood: Principles and Practices	3
CD 3	Creative Experiences for Children I	3
CD 4	Creative Experiences for Children II	3
CD 10	Child Health	3
CD 11	Home, School and Community Relations	3
CD 22	Practicum in Child Development I	4
CD 23	Practicum in Child Development II	4
CD 30	Infant and Toddler Studies I	3
	OR	
CD 34	Observing and Recording Children's Behavior	3
CD 38	Admin. and Supervision of Early Childhood Programs I	3
CD 39	Admin. and Supervision of Early Childhood Programs II	3
CD 65	Adult Supervision and Early Childhood Mentoring	2
FCS 21	Nutrition	3
TOTAL UNITS		40

Note: Students must complete 10 out of the 13 courses within the Los Angeles Community College District. West Los Angeles College requires that CD 22 and CD 23 be taken in residency at West Los Angeles College.

Note: There are pre-requisites and co-requisites for some of the Child Development courses:

- CD 1 and 2 are pre-requisites for CD 3 and 4.
- CD 1, 2, 3, and 4 are pre-requisites for CD 22 and 23.
- CD 48 is a co-requisite for CD 22.
- CD 42 and 65 are co-requisites for CD 23.

CERTIFICATES OF ACHIEVEMENT

Certificate of Achievement in Child Development - (31 units) requires 10 courses (State Approved). The student must complete 7 out of the 11 courses (including CD 22) within the Los Angeles Community College District. West Los Angeles College requires that CD 22 (Practicum) be completed in residency at West Los Angeles College.

CERTIFICATE OF ACHIEVEMENT

MAJOR CODE 1305.00

(31 UNITS)

REQUIRED COURSES		UNITS
CD 1	Child Growth and Development	3
CD 2	Early Childhood: Principles and Practices	3
CD 3	Creative Experiences for Children I	3
CD 4	Creative Experiences for Children II	3
CD 10	Child Health	3
CD 11	Home, School and Community Relations	3
CD 22	Practicum in Child Development I	4
CD 30	Infant and Toddler Studies I	3
	OR	
CD 34	Observing and Recording Children's Behavior	3
CD 38	Admin. and Supervision of Early Childhood Programs I	3
FCS 21	Nutrition	3
TOTAL UNITS		31

SKILL CERTIFICATES

Note: Skill certificates are not state-approved and are not included on transcripts. Only students completing state-approved degrees and/or certificates may participate in commencement.

SKILL CERTIFICATE IN TEACHER/PRIVATE PRE-SCHOOL

MAJOR CODE 1305.11

The student must complete 3 out of the 4 required courses within the Los Angeles Community College District.

REQUIRED COURSES		UNITS
CD 1	Child Growth and Development	3
CD 2	Early Childhood: Principles and Practices	3
CD 3	Creative Experiences for Children I	3
	OR	
CD 4	Creative Experiences for Children II	3
CD 11	Home, School and Community Relations	3
TOTAL UNITS		12

SKILL CERTIFICATE IN DIRECTOR/PRIVATE PRE-SCHOOL

MAJOR CODE 1305.00

The student must complete 4 out of the 5 required courses within the Los Angeles Community College District.

REQUIRED COURSES		UNITS
CD 1	Child Growth and Development	3
CD 2	Early Childhood: Principles and Practices	3
CD 3	Creative Experiences for Children I	3
	OR	
CD 4	Creative Experiences for Children II	3
CD 11	Home, School and Community Relations	3
CD 38	Admin. and Supervision of Early Childhood Programs I	3
	OR	
CD 39	Admin. and Supervision of Early Childhood Programs II	3
TOTAL UNITS		15

The following additional courses are recommended to all students who have an interest in developing a more in-depth knowledge base which should enhance their professionalism in the field.

COURSE		UNITS
CD 12	Parent/Teacher/Child Interaction	3
CD 31	Infant and Toddler Studies II	3
CD 35	Fostering Literacy Development in Young Children	3
CD 42	The Child in a Diverse Society	3
CD 44	Programs for Children with Special Needs I	3
CD 45	Programs for Children with Special Needs II	3
CD 46	School Age Programs I	3
CD 47	School Age Programs II	3
CD 48	Positive Guidance in Early Childhood Settings	3

SKILL CERTIFICATES IN SPECIALIZED AREAS*

*The following skill certificates will only be awarded upon the completion of core coursework (i.e., CD 1; 2; 3 or 4; and 11).

Note: Skill certificates are not state-approved and are not included on transcripts. Only students completing state-approved degrees and/or certificates may participate in commencement.

CURRICULUM DEVELOPMENT IN EARLY CHILDHOOD PROGRAMS

MAJOR CODE 1305.12

CD 1	Child Growth and Development	3
CD 2	Early Childhood: Principles and Practices	3
CD 3	Creative Experiences for Children I	3
CD 4	Creative Experiences for Children II	3
CD 42	The Child in a Diverse Society	3
TOTAL UNITS		15

INFANT AND TODDLER STUDIES

MAJOR CODE 1305.13

CD 1	Child Growth and Development	3
CD 2	Early Childhood: Principles and Practices	3
CD 11	Home, School and Community Relations	3
CD 30	Infant and Toddler Studies I	3
CD 31	Infant and Toddler Studies II	3
TOTAL UNITS		15

EARLY LITERACY DEVELOPMENT

MAJOR CODE 1305.14

CD 1	Child Growth and Development	3
CD 2	Early Childhood: Principles and Practices	3
CD 11	Home, School and Community Relations	3
CD 35	Fostering Literacy Development in Young Children	3
SPEECH 135	Storytelling	3
TOTAL UNITS		15

MAJOR REQUIREMENTS

SPECIAL NEEDS CHILDREN

MAJOR CODE 1305.20

CD 1	Child Growth and Development	3
CD 3	Creative Experiences for Children I OR	3
CD 4	Creative Experiences for Children II	3
CD 11	Home, School and Community Relations	3
CD 44	Programs for Children with Special Needs I	3
CD 45	Programs for Children with Special Needs II	3
TOTAL UNITS		15

SCHOOL AGE PROGRAMS

MAJOR CODE 1305.15

CD 1	Child Growth and Development	3
CD 3	Creative Experiences for Children I OR	3
CD 4	Creative Experiences for Children II	3
CD 11	Home, School and Community Relations	3
CD 46	School Age Programs I	3
CD 47	School Age Programs II	3
TOTAL UNITS		15

ADMINISTRATION AND SUPERVISION OF EARLY CHILDHOOD PROGRAMS

MAJOR CODE 1305.16

(Must hold a Specialization Skill Certificate in Curriculum Development to qualify for this award.)

CD 10	Child Health	3
CD 11	Home, School and Community Relations	3
CD 38	Administration and Supervision of Early Childhood Programs I	3
CD 39	Administration and Supervision of Early Childhood Programs II	3
CD 48	Positive Guidance in Early Childhood Settings	3
CD 65	Adult Supervision and Early Childhood Mentoring	2
TOTAL UNITS		17

HEALTH, NUTRITION, SAFETY AND FOOD SANITATION OF EARLY CHILDHOOD PROGRAMS

MAJOR CODE 1305.17

CD 1	Child Growth and Development	3
CD 10	Child Health	3
FCS 21	Nutrition	3
HEALTH 11	Principles of Healthful Living OR	3
HEALTH 12	Safety Education and First Aid	3
TOTAL UNITS		12

OBSERVATION, ASSESSMENT, AND GUIDANCE IN EARLY CHILDHOOD PROGRAMS

MAJOR CODE 1305.18

CD 1	Child Growth and Development	3
CD 2	Early Childhood: Principles and Practices	3
CD 11	Home, School and Community Relations	3
CD 34	Observing and Recording Children's Behavior	3
CD 48	Positive Guidance in Early Childhood Settings	3
TOTAL UNITS		15

FAMILY DAY CARE PROVIDERS

MAJOR CODE 1305.81

CD 60	Introduction to Family Child Care I	1
CD 61	Introduction to Family Child Care II	1
CD 62	Developmental Profiles: Pre-Birth Through Age Eight	2
CD 63	Creative Curriculum in a Family Child Care Setting	2
TOTAL UNITS		6

CINEMA

SKILL CERTIFICATES

Note: Skill certificates are not state-approved and are not included on transcripts. Only students completing state-approved degrees and/or certificates may participate in commencement.

SKILL CERTIFICATE IN CINEMA

MAJOR CODE 0612.00

Students earning a skill certificate in Cinema acquire a broad, general understanding of film theory, history, and production. Students will get hands-on experience in film production and be instructed in the mechanics of writing for film. They will have the opportunity to analyze screenplays, write a script, and/or produce their own short video or film. Courses are offered in screen writing, script treatment, content development, film history and analysis, and producing and editing of a digital short film.

REQUIRED COURSES

		UNITS
CINEMA 1	Introduction to Motion Picture Production	3
CINEMA 3	History of Motion Pictures	3
CINEMA 5	Introduction to Screenwriting	3

PLUS 6 UNITS FROM THE FOLLOWING:

ART 639	Introduction to Digital Imaging	3
BRDCST 1	Fundamentals of Radio and TV Broadcasting	3
BRDCST 7	Radio Announcing I	3
BRDCST 12	Broadcast Station Operation I	3
BRDCST 14	Broadcast Station Management	3
BRDCST 25	Radio/TV/Film Writing	3
BRDCST 911	Cooperative Education	1
BRDCST 921	Cooperative Education	2
BRDCST 931	Cooperative Education	3
BRDCST 941	Cooperative Education	4

CINEMA 18	Main Currents in Motion Pictures	3
CINEMA 107	Understanding Motion Pictures	3
CINEMA 111	Cinema: Developing Content for Movies	3
CINEMA 112	Script Analysis	3
CINEMA 931	Cooperative Education	3
ENGLISH 240	Literature and the Motion Picture	3
MULTIMD 100	Introduction to Multimedia Computer Applications	3
MULTIMD 210	Digital Editing	3
MULTIMD 320	Web Design	3
TOTAL UNITS		15

CNA/GERIATRIC CARE TECHNICIAN

SKILL CERTIFICATES

Note: Skill certificates are not state-approved and are not included on transcripts. Only students completing state-approved degrees and/or certificates may participate in commencement.

This program is designed to fill the employment gap of caregivers working with the elderly. The National Center Workforce Analysis reports that more than 50% of states report shortages of allied health personnel. This situation will get worse as the total population of California grows through 2020 and the population of those over the age of 65 grows by 58%.

This program consists of two courses (Certified Nurse Assistant and Geriatric Care Technician) and leads to a certificate in Geriatric Care. Students must be admitted to the college, complete pre-admission screening in Math and English, and complete an application packet prior to the start of classes.

Students successfully completing the CNA course will be eligible for certification from the State of California. The application for certification requires fingerprinting and a background check. Applicants who have been convicted of a criminal offense may not be eligible for certification.

For more information contact the Allied Health Office at (310) 287-4464.

SKILL CERTIFICATE IN GERIATRIC CARE TECHNICIAN

MAJOR CODE 1203.00

REQUIRED COURSES	UNITS	
NURSING 56	Essential Practical Skills for Nurse Assistants	1
NURSING 398	Geriatric Care Technician	4
NURSING 399A	Certified Nurse Assistant	5
TOTAL UNITS		10

SKILL CERTIFICATE IN GERIATRIC HOME TECHNICIAN

MAJOR CODE 1203.81

REQUIRED COURSES	UNITS	
NURSING 56	Essential Practical Skills for Nurse Assistants	1
NURSING 398	Geriatric Care Technician	4
NURSING 399	Certified Nurse Assistant/ Home Health Aide	7
TOTAL UNITS		12

COMPUTER APPLICATIONS AND OFFICE TECHNOLOGIES

ASSOCIATE DEGREES

The Associate of Arts degree in Computer Applications and Office Technologies is primarily designed for vocational education and workforce training/development. The curriculum is not aligned with course requirements for transfer to a specific major at a four-year college or university.

WORD PROCESSING OPTION

This curriculum prepares students for office administration occupations with emphasis on computer business application such as advanced word processing, electronic spreadsheet for business analysis, presentation graphics and computerized accounting.

ASSOCIATE OF ARTS DEGREE - WORD PROCESSING OPTION

MAJOR CODE 0514.00

(39 UNITS, PLAN B) + All other West requirements for Associate Degree

REQUIRED COURSES	UNITS	
ACCTG 21	Bookkeeping & Accounting	3
ACCTG 25	Automated Accounting Methods and Procedures	3
BUS 1	Introduction to Business	3
BUS 31	Business English	3
BUS 32	Business Communications	3
BUS 38	Business Computations	3
CAOT 39	Word Processing: Keyboarding and Operations	3
	OR	
CAOT 84	Word Processing Concepts in Information Systems	3
CO SCI 901	Introduction to Computers and Their Use	3
CO SCI 930	Microsoft Advance Business Application	4
CO SCI 934	Operating Systems	3

ELECTIVES (8 UNITS FROM THE FOLLOWING)

Any CAOT or CO SCI courses	8
TOTAL UNITS	39

CERTIFICATES OF ACHIEVEMENT

CERTIFICATE OF ACHIEVEMENT - WORD PROCESSING OPTION

MAJOR CODE 0514.00

(30 UNITS)

REQUIRED COURSES		UNITS
ACCTG 21	Bookkeeping & Accounting	3
ACCTG 25	Automated Accounting Methods and Procedures	3
BUS 31	Business English	3
BUS 32	Business Communications	3
CAOT 39	Word Processing: Keyboarding and Operations OR	3
CAOT 84	Word Processing Concepts in Information Systems	3
CO SCI 901	Introduction to Computers and Their Use	3
CO SCI 930	Microsoft Advance Business Application	4
CO SCI 934	Operating Systems	3
ELECTIVES (5 UNITS FROM THE FOLLOWING) Any CAOT or CO SCI courses		5
TOTAL UNITS		30

CERTIFICATE OF ACHIEVEMENT - LEGAL SECRETARY (Low Unit)

MAJOR CODE 0514.10

(17 UNITS)

This program prepares individuals with the knowledge and skills to perform secretarial duties and assume specific responsibilities in a legal office.

REQUIRED COURSES		UNITS
CAOT 23ABC	Legal Secretarial Procedures	3
CAOT 39	Word Processing, Keyboarding and Operations	3
CAOT 79	Word Processing Equipment Operation	3
CAOT 84	Word Processing, Concepts in Information Systems	3
CAOT 93	Legal Documents Production	2
PARALEGAL 10 (or LAW 10)	Introduction to Legal Assistant	3
TOTAL UNITS		17

COMPUTER SCIENCE INFORMATION TECHNOLOGY

ASSOCIATE DEGREES

COMPUTER SCIENCE INFORMATION TECHNOLOGY OPTION
COMPUTER NETWORK AND SECURITY MANAGEMENT OPTION
COMPUTER WEB SUPPORT AND DATABASE ADMINISTRATION OPTION

The Associate degrees in Computer Science Information Technology are primarily designed for vocational education and workforce training/development. Although the curriculum is not specifically designed for transfer to a four-year college or university, the program offers a variety of courses that fulfill some lower-division requirements for transfer.

Students interested in transferring to a four-year college or university with a major in Computer Science or a related major may consider the Associate of Arts degree in Liberal Arts and Sciences with an emphasis in Math, Science, and Computer Science. Students should consult the Transfer Center or the Counseling Office for major preparation and general education requirements of the particular transfer institution of their choice.

The Associate degrees in Computer Science Information Technology provide instruction to students interested in careers in computing, information systems management and security, computer network, web development and database administration, and business application. A Computer Science Information Technology option, Computer Web Support and Database Administration option, and a Computer Network and Security Management option are offered.

The Associate of Arts degree (AA) follows Plan A with 30 units of major courses and 30 units of General Education courses. The Associate of Science degree (AS) follows Plan B with 30 units of major courses, 18 units of GE courses, and 12 units of any CO SCI courses.

ASSOCIATE OF ARTS OR SCIENCE DEGREE - COMPUTER SCIENCE INFORMATION TECHNOLOGY OPTION

MAJOR CODE 0702.00

(30 UNITS, PLAN A OR PLAN B) + All other West requirements for Associate Degree

REQUIRED COURSES		UNITS
CO SCI 902	Introduction to Computer Science	3
CO SCI 917	Beginning Micro-Assembly Language	3
CO SCI 934	Operating Systems OR	3
CO SCI 935	Introduction to Linux+	3

CO SCI 936	Introduction to Data Structures	3
CO SCI 939	Programming in C	3
CO SCI 965	Introduction to Computer Networks	3
CO SCI 990	Object-Oriented Programming in Java	4

ELECTIVES (8 UNITS FROM THE FOLLOWING)

Any CO SCI courses	8
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TOTAL UNITS	30
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**ASSOCIATE OF ARTS OR SCIENCE DEGREE
- COMPUTER NETWORK AND SECURITY
MANAGEMENT OPTION**

MAJOR CODE 0708.11

(30 UNITS, PLAN A OR PLAN B) + All other West requirements for Associate Degree

REQUIRED COURSES	UNITS
CO SCI 934 Operating Systems OR	3
CO SCI 935 Introduction to Linux+	3
CO SCI 965 Introduction to Computer Networks	3
CO SCI 972 Introduction to Cisco Network Fundamentals	3
CO SCI 974 Introduction to Cisco Routers	3
CO SCI 980 Introduction to Computer and Information Security I	3
CO SCI 982 Introduction to Microsoft Server Operating System	3
CO SCI 985 Network and Information System Security	3

ELECTIVES (9 UNITS FROM THE FOLLOWING)

CO SCI 967 Linux.Apache.MySQL.Virtual and Cloud Computing	3
CO SCI 981 Administering Computer Networks and Security	3
CO SCI 983 Microsoft Networking Infrastructure Administration	3
CO SCI 984 Introduction to Windows Active Directory Services	3
CO SCI 987 Information Storage Management/Virtual Server	3
CO SCI 988 Microsoft SQL Server	3
CO SCI 989 Microsoft Exchange Server	3

TOTAL UNITS	30
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**ASSOCIATE OF ARTS OR SCIENCE DEGREE
- COMPUTER WEB SUPPORT & DATABASE
ADMINISTRATION OPTION**

MAJOR CODE 0709.00

(31 UNITS, PLAN A OR PLAN B) + All other West requirements for Associate Degree

REQUIRED COURSES	UNITS
CO SCI 933 Database Design (Microsoft Access) OR	3
CO SCI 953 Database Management Using Oracle	3
CO SCI 937 E-Commerce Essentials OR	3
CO SCI 980 Introduction to Computer and Information Security I	3
CO SCI 938 Web Application Programming Using VB.net OR	3
CO SCI 963 Web Application Using ASP.net	3

CO SCI 952 Web Page Development Using Macromedia Flash OR	3
CO SCI 957 Introduction to Web Page Development	3
CO SCI 958 Web Development Using HTML OR	4
CO SCI 962 Web Programming Using JavaScript	4
CO SCI 967 Linux.Apache.MySQL.Virtual and Cloud Computing OR	3
CO SCI 982 Introduction to Microsoft Server Operating System	3
CO SCI 987 Information Storage Management/Virtual Server OR	3
CO SCI 988 Microsoft SQL Server OR	3
CO SCI 989 Microsoft Exchange Server	3

ELECTIVES (9 UNITS FROM THE FOLLOWING)

ANY COURSE NOT TAKEN FROM ABOVE OR

CO SCI 930 Advanced Microsoft Application Software	4
CO SCI 934 Operating Systems	3
CO SCI 935 Introduction to Linux+	3
CO SCI 948 Advanced Spreadsheet for Business Analysis	3
CO SCI 981 Administering Computer Networks and Security	3
CO SCI 985 Network and Information System Security	3
CO SCI 987 Information Storage Management/Virtual Server	3
CO SCI 990 Object-Oriented Programming in Java	4

TOTAL UNITS	31
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CERTIFICATES OF ACHIEVEMENT

**CERTIFICATE OF ACHIEVEMENT - BUSINESS
APPLICATION AND DATABASE MANAGEMENT
(Low Unit)**

MAJOR CODE 0701.01

(16 UNITS)

This program enables the student to use application software such as advanced word processing, electronic spreadsheet, database management and presentation graphics to solve typical business problems and perform business analysis.

Concentration in Microsoft and Oracle database application development and Linux database system administration. See Department for course sequence.

REQUIRED COURSES (16 UNITS FROM THE FOLLOWING)

CO SCI 930 Intermediate Microsoft Office Application	4
CO SCI 933 Database Design (Microsoft Access)	3
CO SCI 934 Operating System	3
CO SCI 937 E-Commerce Essentials	3
CO SCI 938 Web Application Programming Using VB.net	3
CO SCI 948 Advanced Spreadsheet for Business Analysis	3
CO SCI 953 Database Management Using Oracle	3
CO SCI 967 Linux.Apache.MySQL.Virtual and Cloud Computing	3
CO SCI 980 Introduction to Computer and Information Security I	3
CO SCI 987 Information Storage Management/Virtual Server	3
CO SCI 988 Microsoft SQL Server	3
CO SCI 990 Object Oriented Programming in Java	4

TOTAL UNITS	16
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MAJOR REQUIREMENTS

CERTIFICATE OF ACHIEVEMENT - COMPUTER NETWORK AND INFORMATION SYSTEM SECURITY (Low unit)

MAJOR CODE 0708.01

(16 UNITS)

The curriculum is intended to help students develop skills to design, administer, and manage the heterogeneous corporate network and information system with security emphasis. The courses examine and illustrate network security with industry leading network operating systems. Individual courses will assist students in preparing for related industry certification exams.

REQUIRED COURSES	UNITS
CO SCI 965 Introduction to Computer Networks	3
CO SCI 980 Introduction to Computer and Information Security I	3
CO SCI 985 Network and Information System Security	3

ELECTIVES (7 UNITS FROM THE FOLLOWING)

CO SCI 967 Linux.Apache.MySQL.Virtual and Cloud Computing	3
CO SCI 981 Administering Computer Networks and Security	3
CO SCI 982 Introduction to Microsoft Server Operating System	3
CO SCI 983 Microsoft Networking Infrastructure Administration	3
CO SCI 984 Introduction to Windows Active Directory Services	3
CO SCI 987 Information Storage Management/Virtual Server	3
CO SCI 988 Microsoft SQL Server	3
CO SCI 989 Microsoft Exchange Server	3
CO SCI 992 Computer A+ Hardware Laboratory	1
TOTAL UNITS	16

CERTIFICATE OF ACHIEVEMENT - COMPUTER NETWORK AND SECURITY MANAGEMENT

MAJOR CODE 0708.13

(30 UNITS)

REQUIRED COURSES	UNITS
CO SCI 934 Operating Systems OR	3
CO SCI 935 Introduction to Linux+	3
CO SCI 965 Introduction to Computer Networks	3
CO SCI 972 Introduction to Cisco Network Fundamentals	3
CO SCI 974 Introduction to Cisco Routers	3
CO SCI 980 Introduction to Computer and Information Security I	3
CO SCI 982 Introduction to Microsoft Server Operating System	3
CO SCI 985 Network and Information System Security	3

ELECTIVES (9 UNITS FROM THE FOLLOWING)

CO SCI 967 Linux.Apache.MySQL.Virtual and Cloud Computing	3
CO SCI 981 Administering Computer Networks and Security	3
CO SCI 983 Microsoft Networking Infrastructure Administration	3
CO SCI 984 Introduction to Windows Active Directory Services	3
CO SCI 987 Information Storage Management/Virtual Server	3
CO SCI 988 Microsoft SQL Server	3
CO SCI 989 Microsoft Exchange Server	3
TOTAL UNITS	30

CERTIFICATE OF ACHIEVEMENT - COMPUTER NETWORK MANAGEMENT (Low unit)

(17 UNITS)

MAJOR CODE 0706.01

Microsoft Network training at West prepares students to pass Microsoft Certification exams. These industry-demand certifications are important to those who wish to pursue a career working with Microsoft network. This program provides support professionals' core foundation for supporting Microsoft domain network.

REQUIRED COURSES	UNITS
CO SCI 972 Introduction to Cisco Network Fundamentals	3
CO SCI 974 Introduction to Cisco Routers	3
CO SCI 982 Introduction to Microsoft Server Operating System	3

ELECTIVES (8 UNITS FROM THE FOLLOWING)

CO SCI 967 Linux.Apache.MySQL.Virtual and Cloud Computing	3
CO SCI 980 Introduction to Computer and Information Security I	3
CO SCI 981 Administering Computer Networks and Security	3
CO SCI 983 Microsoft Networking Infrastructure Administration	3
CO SCI 984 Introduction to Windows Active Directory Services	3
CO SCI 985 Network and Information System Security	3
CO SCI 987 Information Storage Management/Virtual Server	3
CO SCI 988 Microsoft SQL Server	3
CO SCI 989 Microsoft Exchange Server	3
CO SCI 991 Cisco Router Laboratory	1
CO SCI 992 Computer A+ Hardware Laboratory	1
TOTAL UNITS	17

CERTIFICATE OF ACHIEVEMENT - COMPUTER SCIENCE INFORMATION TECHNOLOGY

MAJOR CODE 0702.00

(30 UNITS)

REQUIRED COURSES	UNITS
CO SCI 902 Introduction to Computer Science	3
CO SCI 917 Beginning Micro-Assembly Language	3
CO SCI 934 Operating Systems OR	3
CO SCI 935 Introduction to Linux+	3
CO SCI 936 Introduction to Data Structures	3
CO SCI 939 Programming in C	3
CO SCI 965 Introduction to Computer Networks	3
CO SCI 990 Object-Oriented Programming in Java	4

ELECTIVES (8 UNITS FROM THE FOLLOWING)

Any CO SCI courses	8
TOTAL UNITS	30

**CERTIFICATE OF ACHIEVEMENT -
COMPUTER WEB SUPPORT & DATABASE
ADMINISTRATION**

MAJOR CODE 0709.00

(31 UNITS)

REQUIRED COURSES		UNITS
CO SCI 933	Database Design (Microsoft Access) OR	3
CO SCI 953	Database Management Using Oracle	3
CO SCI 937	E-Commerce Essentials OR	3
CO SCI 980	Introduction to Computer and Information Security I	3
CO SCI 938	Web Application Programming Using VB.net OR	3
CO SCI 963	Web Application Using ASP.net	3
CO SCI 952	Web Page Development Using Macromedia Flash OR	3
CO SCI 957	Introduction to Web Page Development	3
CO SCI 958	Web Development Using HTML OR	4
CO SCI 962	Web Programming Using JavaScript	4
CO SCI 967	Linux.Apache.MySQL.Virtual and Cloud Computing OR	3
CO SCI 982	Introduction to Microsoft Server Operating System	3
CO SCI 987	Information Storage Management/Virtual Server OR	3
CO SCI 988	Microsoft SQL Server OR	3
CO SCI 989	Microsoft Exchange Server	3

ELECTIVES (9 UNITS FROM THE FOLLOWING)

ANY COURSE NOT TAKEN FROM ABOVE OR

CO SCI 930	Advanced Microsoft Application Software	4
CO SCI 934	Operating Systems	3
CO SCI 935	Introduction to Linux+	3
CO SCI 948	Advanced Spreadsheet for Business Analysis	3
CO SCI 981	Administering Computer Networks and Security	3
CO SCI 985	Network and Information System Security	3
CO SCI 987	Information Storage Management/Virtual Server	3
CO SCI 990	Object-Oriented Programming in Java	4
TOTAL UNITS		31

**CERTIFICATE OF ACHIEVEMENT - WEBSITE
SUPPORT AND ADMINISTRATION (LOW UNIT)**

MAJOR CODE 0709.05

(16 UNITS)

The curriculum is intended to help students develop skills in designing, building, programming, populating with contents, branding, marketing, supporting, and managing websites. This program also provides students with the knowledge and skills to administer web site security and to manage client-server database.

REQUIRED COURSES		UNITS
CO SCI 933	Database Design and Programming	3
CO SCI 937	E-Commerce Essentials	3
CO SCI 938	Web Application Programming Using VB.net	3
CO SCI 952	Web Design Using Flash	3
CO SCI 953	Database Management Using Oracle	3
CO SCI 957	Introduction to Web Page Design	3
CO SCI 958	Web Page Development Using HTML	3
CO SCI 962	Web Development with JAVA Script	4
CO SCI 963	Web Application Using ASP.net	3
CO SCI 967	Linux.Apache.MySQL.Virtual and Cloud Computing	3
CO SCI 987	Information Storage Management/Virtual Server	3
CO SCI 988	Microsoft SQL Server	3
CO SCI 990	Object-Oriented Programming in Java	4
TOTAL UNITS		16

DENTAL HYGIENE

ASSOCIATE DEGREES

The Associate of Science degree in Dental Hygiene is primarily designed for vocational education and workforce training/development. The curriculum is not aligned with course requirements for transfer to a specific major at a four-year college or university.

The dental hygienist, as a member of the dental health team, is qualified by education and license to provide primary care to patients for the maintenance of oral health and the prevention of oral disease. The hygienist removes deposits and stains from teeth, applies agents to help prevent tooth decay, prepares clinical tests and provides oral health instruction.

The Program in Dental Hygiene is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the Commission on Recognition of Post Secondary Accreditation, and by the United States Department of Education. Admission to the Dental Hygiene program is by special selection. The admission requirements are available from the Counseling Office or the Dental Hygiene Department.

Dental Hygiene classroom and laboratory facilities are located on campus at West Los Angeles College. The students provide dental hygiene services to patients at UCLA Dental Clinic, Veterans Hospital, Cedars-Sinai Hospital, Kid's Dental Clinic and the UCLA Venice Clinic. Students also observe and participate in various specialty clinics at UCLA which include radiology, pedodontics, periodontics, oral surgery and hospital dentistry. For more information, call (310) 287-4464 or visit the Allied Health website at www.wlac.edu/alliedhealth/ or come to the Dental Hygiene office.