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**ARCHITECTURAL TECHNOLOGY
ASSOCIATE OF ARTS DEGREE**

This program emphasizes the technical aspects of the architectural profession while including its artistic components. Students are provided with an in-depth knowledge of the career and technical skills required to succeed in the profession and to potentially continue their studies at a professional school of architecture.

Program Requirements

Required courses (34 units total)		Units
ARCH 110	Introduction to Architecture and Environmental Design	3
or ARCH 114	Green Architecture and LEED	(3)
ARCH 111	Architectural Drafting and Design I	3
ARCH 112	History of Architecture	3
ARCH 113	Building Codes	4
ARCH 121	Architectural Drafting and Design II	3
ARCH 123	Introduction to 2D Computer Aided Drafting	4
ARCH 212	Architectural Design Theory I	3
ARCH 213	Introduction to 3D Computer Aided Drafting	4
ARCH 221	AutoCAD Architecture	4
or ARCH 223	REVIT Architecture	(4)
ART 110	Freehand Drawing	3

TOTAL REQUIREMENTS:		34

Associate of Arts Degree Requirements:

Students must complete the required major courses, the Cerritos College Associate of Arts General Education requirements, and electives as needed. Students must earn a 2.0 grade point average and earn a grade of "C" or higher in major/emphasis courses.

Recommended Electives:

ARCH 101	Intro to Civil Engineering and Architecture	4.0
ART 185	Rendering I	3.0
BA 100	Fundamentals of Business	3.0
PSYC 101	General Introductory Psychology	3.0
RE 101	Real Estate Principles	3.0

**BUSINESS ADMINISTRATION
CERTIFICATE OF ACHIEVEMENT**

The Business Administration Certificate of Achievement is a Career Technical Education (CTE) program which provides students with credentials that are the key to individual self-efficacy and a meaningful career. Mastery of this curriculum will help students lay the groundwork for managerial competence in the global marketplace. Business Administration education also helps students understand basic business functions, their interrelationships, and the organization's competitive niche. There are numerous career opportunities that exist in the Business Field including Industry, Government, and Self-Employment.

Business Core Courses (12.0 units):		Units
BA 100	Fundamentals of Business	3.0
BA 120	Management – Accounting and Internal Control	3.0
BA 132	Computer Applications for Managers	3.0
BA 156	Motivational Presentation Skills for Managers	3.0
or BCOT 148	Effective Business Presentations	(3.0)
or BCOT 247	Managerial Business Communications	(3.0)
or SPCH 100	Fundamentals of Oral Communication	(3.0)
or SPCH 130	Fundamentals of Speaking	<u>(3.0)</u>
Subtotal:		12.0

Certificate Specific Courses (12.0 units):		Units
BA 113	Legal Environment of Business	3.0
or LAW 110	Business Law	(3.0)
BA 114	Marketing	3.0
BA 115	Management-Business	3.0
BA 205	Organizational Leadership	3.0
or BA 208	Leadership for Women in Business	(3.0)
or WS 208	Leadership for Women in Business	<u>(3.0)</u>
Subtotal:		12.0
Total Certificate:		24.0

Requirements for a Business Administration Certificate of Achievement:

Complete the Business Core courses (12.0 units) and the Certificate Specific courses (12.0 units) listed above with a grade of "C" or higher or "Pass."

NOTE: Although many of these courses are transferable, this Certificate is nontransferable. Please see a Business Counselor or the respective department chairperson for additional alternatives.

Note: The Associate of Arts Degree in (Business Administration) is in the process of being updated. The AA requirements outlined below may necessitate course substitutions where appropriate to fulfill the degree requirements. If you have questions, please refer to the Business Administration department chair or make an appointment with a counselor.

**BUSINESS ADMINISTRATION
CERTIFICATE OF ACHIEVEMENT**

DIVISION/DEPARTMENT REQUIREMENTS (15 UNITS)		UNITS
BA 113	Legal Environment of Business	3
or LAW 111	Business Law	(3)
BA 114	Marketing	3
or ECON 201*	Principles of Macroeconomics	(3)
BA 115	Management-Business	3
BA 120	Management-Accounting and Internal Control	3
or ACCT 100*	Introduction to Accounting	(3)
BA 205	Organizational Leadership	3
or BA 208*	Leadership for Women in Business	(3)

BUSINESS ESSENTIAL COURSES: (9-9.5 UNITS)

BA 100	Fundamentals of Business	3
BA 132	Computer Applications for Managers	3
or CIS 101*	Introduction to Computer Information Systems	(3)
or BCOT 114	Introduction to Microsoft Office	(3.5)
BA 156	Motivational Presentation Skills for Managers	3
or SPCH 100*	Fundamentals of Oral Communication	(3)
or SPCH 130*	Fundamentals of Speaking	(3)
or BCOT 148	Effective Business Presentations	(3)
or BCOT 247*	Managerial Business Communications	(3)

TOTAL CERTIFICATE REQUIREMENTS: 24-24.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

By substituting classes with (*), you can meet both Certificate of Achievement and the AA Degree requirements.

Certificate of Achievement – Complete the Business Essential courses (9-9.5) and Department Requirements (15 units) with a grade of “C” or higher.

Associate in Arts Degree Requirements – Students must meet the Math, Reading, Writing, and Health and Wellness Proficiencies, complete the required Certificate of Achievement classes listed above and the requirements for the Associate in Arts Degree under Plan A, B, or C. Students must earn a 2.0 grade point average and earn a grade of “C” or higher in major/emphasis courses.

Plan A: To obtain a Plan A Associates in Arts Degree, complete the Business Administration Certificate of Achievement classes, the General Education (GE) requirements (18 units) for Plan A (Degree and/or Career Option) in the Cerritos College Catalog, 9 units (not used above) from the following classes: ACCT 101, BA 101, BA 104, BA 108, BA 109, BA 110, BA 113, BA 116, BA 121, BA 124, BA 125, BA 126, BA 152, BA 153, BA 155, BA 156, BA 173, BA 204, BA 205, BA 208, BA 233, ECON 201, or ECON 201M, ECON 202 or ECON 202M, any additional courses to reach a minimum of 60 degree applicable units.

Plan B: To obtain a Plan B Associates in Arts Degree, complete the Business Administration Certificate of Achievement classes, the General Education (GE) requirement for Plan B (CSU) in the Cerritos College Catalog, and any additional courses to reach a minimum of 60 degree applicable units.

Plan C: To obtain a Plan C Associates in Arts Degree, complete the Business Administration of Certificate of Achievement classes, the General Education (GE) requirements for Plan C Intersegmental General Education Transfer Curriculum (IGETC) for transfer to UC and CSU in the Cerritos College Catalog, and any additional courses to reach a minimum of 60 degree applicable units.

Note: The Associate of Arts Degree in (Business Management) is in the process of being updated. The AA requirements outlined below may necessitate course substitutions where appropriate to fulfill the degree requirements. If you have questions, please refer to the Business Administration department chair or make an appointment with a counselor.

**BUSINESS MANAGEMENT
CERTIFICATE OF ACHIEVEMENT**

DIVISION/DEPARTMENT REQUIREMENTS (15 UNITS)		UNITS
BA 101	International Business	3
or BA 116	Managing Green: Sustainability and Innovation	(3)
or BA 155	Introduction to Global Logistics	(3)
or BA 204	Project Management	(3)
BA 113	Legal Environment of Business	3
or LAW 111	Business Law	(3)
BA 114	Marketing	3
BA 115	Management-Business	3
BA 120	Management-Accounting and Internal Control	3
or ACCT 100*	Introduction to Accounting	(3)
BUSINESS ESSENTIAL COURSES: (9-9.5 UNITS)		
BA 100	Fundamentals of Business	3
BA 132	Computer Applications for Managers	3
or CIS 101*	Introduction to Computer Information Systems	(3)
or BCOT 114	Introduction to Microsoft Office	(3.5)
BA 156	Motivational Presentation Skills for Managers	3
or SPCH 100*	Fundamentals of Oral Communication	(3)
or SPCH 130*	Fundamentals of Speaking	(3)
or BCOT 148	Effective Business Presentations	(3)
or BCOT 247*	Managerial Business Communications	(3)
TOTAL CERTIFICATE REQUIREMENTS		24-24.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

By substituting classes with (*), you can meet both Certificate of Achievement and the AA Degree requirements.

Certificate of Achievement – Complete the Business Essential courses (9-9.5) and Department Requirements (15 units) with a grade of “C” or higher.

Associate in Arts Degree Requirements – Students must meet the Math, Reading, Writing, and Health and Wellness Proficiencies, complete the required Certificate of Achievement classes listed above and the requirements for the Associate in Arts Degree under Plan A, B, or C. Students must earn a 2.0 grade point average and earn a grade of “C” or higher in major/emphasis courses.

Plan A: To obtain a Plan A Associates in Arts Degree, complete the Business Management Certificate of Achievement classes, the General Education (GE) requirements (18 units) for Plan A (Degree and/or Career Option) in the Cerritos College Catalog, 9 units (not used above) from the following classes: ACCT 101, BA 101, BA 104, BA 108, BA 109, BA 110, BA 116, BA 121, BA 124, BA 125, BA 126, BA 153, BA 155, BA 173, BA 204, BA 205, BA 208, BA 233, ECON 201, or ECON 201M, ECON 202 or ECON 202M, any additional courses to reach a minimum of 60 degree applicable units.

Plan B: To obtain a Plan B Associates in Arts Degree, complete the Business Management Certificate of Achievement classes, the General Education (GE) requirement for Plan B (CSU) in the Cerritos College Catalog, and any additional courses to reach a minimum of 60 degree applicable units.

Plan C: To obtain a Plan C Associates in Arts Degree, complete the Business Management of Certificate of Achievement classes, the General Education (GE) requirements for Plan C Intersegmental General Education Transfer Curriculum (IGETC) for transfer to UC and CSU in the Cerritos College Catalog, and any additional courses to reach a minimum of 60 degree applicable units.

Note: The Associate of Arts Degree in (Business Marketing) is in the process of being updated. The AA requirements outlined below may necessitate course substitutions where appropriate to fulfill the degree requirements. If you have questions, please refer to the Business Administration department chair or make an appointment with a counselor.

**BUSINESS MARKETING
CERTIFICATE OF ACHIEVEMENT**

DIVISION/DEPARTMENT REQUIREMENTS (15 UNITS)		UNITS
BA 101	International Business	3
or BA 155	Introduction to Global Logistics	(3)
BA 110	Advertising	3
BA 114	Marketing	3
BA 121	Sales	3
BA 157	Principles of Public Relations	3
or JOUR 157	Principles of Public Relations	(3)

BUSINESS ESSENTIAL COURSES: (9-9.5 units)

BA 100	Fundamentals of Business	3
BA 132	Computer Applications for Managers	3
or CIS 101*	Introduction to Computer Information Systems	(3)
or BCOT 114	Introduction to Microsoft Office	(3.5)
BA 156	Motivational Presentation Skills for Managers	3
or SPCH 100*	Fundamentals of Oral Communication	(3)
or SPCH 130*	Fundamentals of Speaking	(3)
or BCOT 148	Effective Business Presentations	(3)
or BCOT 247*	Managerial Business Communications	(3)

TOTAL CERTIFICATE REQUIREMENTS 24-24.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

By substituting classes with (*), you can meet both Certificate of Achievement and the AA Degree requirements.

Certificate of Achievement – Complete the Business Essential courses (9-9.5) and Department Requirements (15 units) with a grade of “C” or higher.

Associate in Arts Degree Requirements – Students must meet the Math, Reading, Writing, and Health and Wellness Proficiencies, complete the required Certificate of Achievement classes listed above and the requirements for the Associate in Arts Degree under Plan A, B, or C. Students must earn a 2.0 grade point average and earn a grade of “C” or higher in major/emphasis courses.

Plan A: To obtain a Plan A Associates in Arts Degree, complete the Business Marketing Certificate of Achievement classes, the General Education (GE) requirements (18 units) for Plan A (Degree and/or Career Option) in the Cerritos College Catalog, 9 units (not used above) from the following classes: ACCT 101, BA 101, BA 104, BA 108, BA 109, BA 116, BA 121, BA 124, BA 125, BA 126, BA 152, BA 153, BA 155, BA 157, BA 173, BA 204, BA 205, BA 208, BA 233, ECON 201, or ECON 201M, ECON 202 or ECON 202M, any additional courses to reach a minimum of 60 degree applicable units.

Plan B: To obtain a Plan B Associates in Arts Degree, complete the Business Marketing Certificate of Achievement classes, the General Education (GE) requirement for Plan B (CSU) in the Cerritos College Catalog, and any additional courses to reach a minimum of 60 degree applicable units.

Plan C: To obtain a Plan C Associates in Arts Degree, complete the Business Marketing of Certificate of Achievement classes, the General Education (GE) requirements for Plan C Intersegmental General Education Transfer Curriculum (IGETC) for transfer to UC and CSU in the Cerritos College Catalog, and any additional courses to reach a minimum of 60 degree applicable units.

Note: The Associate of Arts Degree in (International Business) is in the process of being updated. The AA requirements outlined below may necessitate course substitutions where appropriate to fulfill the degree requirements. If you have questions, please refer to the Business Administration department chair or make an appointment with a counselor.

INTERNATIONAL BUSINESS CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS (15 UNITS)	UNITS
BA 101 International Business	3
BA 102 International Business Law	3
or BA 113 Legal Environment of Business	(3)
or LAW 111 Business Law	(3)
BA 114 Marketing	3
BA 120 Management-Accounting and Internal Control	3
or ACCT 100* Introduction to Accounting	(3)
BA 152 Fundamentals of Importing and Exporting	3
or BA 155 Introduction to Global Logistics	(3)

BUSINESS ESSENTIAL COURSES: (9-9.5 UNITS)

BA 104 Managing Cultural Diversity	3
BA 132 Computer Applications for Managers	3
or CIS 101* Introduction to Computer Information Systems	(3)
or BCOT 114 Introduction to Microsoft Office	(3.5)
BA 156 Motivational Presentation Skills Managers	3
or SPCH 100* Fundamentals of Oral Communication	(3)
or SPCH 130* Fundamentals of Speaking	(3)
or BCOT 247* Managerial Business Communications	(3)

TOTAL CERTIFICATE REQUIREMENTS: 24-24.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

By substituting classes with (*), you can meet both Certificate of Achievement and the AA Degree requirements.

Certificate of Achievement – Complete the Business Essential courses (9-9.5) and Department Requirements (15 units) with a grade of “C” or higher.

Associate in Arts Degree Requirements – Students must meet the Math, Reading, Writing, and Health and Wellness Proficiencies, complete the required Certificate of Achievement classes listed above and the requirements for the Associate in Arts Degree under Plan A, B, or C. Students must earn a 2.0 grade point average and earn a grade of “C” or higher in major/emphasis courses.

Plan A: To obtain a Plan A Associates in Arts Degree, complete the International Business Certificate of Achievement classes, the General Education (GE) requirements (18 units) for Plan A (Degree and/or Career Option) in the Cerritos College Catalog, 9 units (not used above) from the following classes: ACCT 101, BA 100, BA 104, BA 108, BA 109, BA 110, BA 116, BA 121, BA 124, BA 125, BA 126, BA 152, BA 153, BA 155, BA 173, BA 204, BA 205, BA 208, BA 233, ECON 201, or ECON 201M, ECON 202 or ECON 202M, any additional courses to reach a minimum of 60 degree applicable units.

Plan B: To obtain a Plan B Associates in Arts Degree, complete the International Business Certificate of Achievement classes, the General Education (GE) requirement for Plan B (CSU) in the Cerritos College Catalog, and any additional courses to reach a minimum of 60 degree applicable units.

Plan C: To obtain a Plan C Associates in Arts Degree, complete the International Business of Certificate of Achievement classes, the General Education (GE) requirements for Plan C Intersegmental General Education Transfer Curriculum (IGETC) for transfer to UC and CSU in the Cerritos College Catalog, and any additional courses to reach a minimum of 60 degree applicable units.

Note: The Associate of Arts Degree in (Retail Management) is in the process of being updated. The AA requirements outlined below may necessitate course substitutions where appropriate to fulfill the degree requirements. If you have questions, please refer to the Business Administration department chair or make an appointment with a counselor.

**RETAIL MANAGEMENT
CERTIFICATE OF ACHIEVEMENT**

DIVISION/DEPARTMENT REQUIREMENTS (15 UNITS)		UNITS
BA 106	Human Resource Management	3
BA 114	Marketing	3
BA 115	Management-Business	3
or BA 205	Organizational Leadership	(3)
or BA 208*	Leadership for Women in Business	(3)
BA 120	Management-Accounting and Internal Control	3
or ACCT 100*	Introduction to Accounting	(3)
BA 118	Retail Management	3
or BA 123	Fundamentals of Retailing	3

BUSINESS ESSENTIAL COURSES: (9-9.5 UNITS)

BA 107	Human Relations in Business	3
BA 132	Computer Applications for Managers	3
or CIS 101*	Introduction to Computer Information Systems	(3)
or BCOT 114	Introduction to Microsoft Office	(3.5)
BA 156	Motivational Presentation Skills for Managers	3
or SPCH 100*	Fundamentals of Oral Communication	(3)
or SPCH 130*	Fundamentals of Speaking	(3)
or BCOT 148	Effective Business Presentations	(3)
or BCOT 247*	Managerial Business Communications	(3)

TOTAL CERTIFICATE REQUIREMENTS: 24-24.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

By substituting classes with (*), you can meet both Certificate of Achievement and the AA Degree requirements.

Certificate of Achievement – Complete the Business Essential courses (9-9.5) and Department Requirements (15 units) with a grade of “C” or higher.

Associate in Arts Degree Requirements – Students must meet the Math, Reading, Writing, and Health and Wellness Proficiencies, complete the required Certificate of Achievement classes listed above and the requirements for the Associate in Arts Degree under Plan A, B, or C. Students must earn a 2.0 grade point average and earn a grade of “C” or higher in major/emphasis courses.

Plan A: To obtain a Plan A Associates in Arts Degree, complete the Retail Management Certificate of Achievement classes, the General Education (GE) requirements (18 units) for Plan A (Degree and/or Career Option) in the Cerritos College Catalog, 9 units (not used above) from the following classes: ACCT 101, BA 100, BA 101, BA 104, BA 108, BA 109, BA 110, BA 116, BA 121, BA 124, BA 125, BA 126, BA 152, BA 153, BA 155, BA 173, BA 204, BA 205, BA 208, BA 233, ECON 201, or ECON 201M, ECON 202 or ECON 202M, any additional courses to reach a minimum of 60 degree applicable units.

Plan B: To obtain a Plan B Associates in Arts Degree, complete the Retail Management Certificate of Achievement classes, the General Education (GE) requirement for Plan B (CSU) in the Cerritos College Catalog, and any additional courses to reach a minimum of 60 degree applicable units.

Plan C: To obtain a Plan C Associates in Arts Degree, complete the Retail Management of Certificate of Achievement classes, the General Education (GE) requirements for Plan C Intersegmental General Education Transfer Curriculum (IGETC) for transfer to UC and CSU in the Cerritos College Catalog, and any additional courses to reach a minimum of 60 degree applicable units.

Note: The Associate of Arts Degree in (Small Business Management/Entrepreneurship) is in the process of being updated. The AA requirements outlined below may necessitate course substitutions where appropriate to fulfill the degree requirements. If you have questions, please refer to the Business Administration department chair or make an appointment with a counselor.

**SMALL BUSINESS MANAGEMENT/ ENTREPRENEURSHIP
CERTIFICATE OF ACHIEVEMENT**

DIVISION/DEPARTMENT REQUIREMENTS (15 UNITS)		UNITS
BA 113	Legal Environment of Business	3
or LAW 111	Business Law	(3)
BA 114	Marketing	3
BA 115	Management-Business	3
or BA 117	Introduction to Supervision	(3)
BA 120	Management-Accounting and Internal Control	3
or ACCT 100*	Introduction to Accounting	(3)
BA 153	Small Business Management	3

BUSINESS ESSENTIAL COURSES: (9-9.5 UNITS)

BA 106	Human Resource Management	3
BA 132	Computer Applications for Managers	3
or CIS 101*	Introduction to Computer Information Systems	(3)
or BCOT 114	Introduction to Microsoft Office	(3.5)
BA 156	Motivational Presentation Skills for Managers	3
or SPCH 100*	Fundamentals of Oral Communication	(3)
or SPCH 130*	Fundamentals of Speaking	(3)
or BCOT 148	Effective Business Presentations	(3)
or BCOT 247*	Managerial Business Communications	(3)

TOTAL CERTIFICATE REQUIREMENTS: 24-24.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

By substituting classes with (*), you can meet both Certificate of Achievement and the AA Degree requirements.

Certificate of Achievement – Complete the Business Essential courses (9-9.5) and Department Requirements (15 units) with a grade of “C” or higher.

Associate in Arts Degree Requirements – Students must meet the Math, Reading, Writing, and Health and Wellness Proficiencies, complete the required Certificate of Achievement classes listed above and the requirements for the Associate in Arts Degree under Plan A, B, or C. Students must earn a 2.0 grade point average and earn a grade of “C” or higher in major/emphasis courses.

Plan A: To obtain a Plan A Associates in Arts Degree, complete the Small Business Management/Entrepreneurship Certificate of Achievement classes, the General Education (GE) requirements (18 units) for Plan A (Degree and/or Career Option) in the Cerritos College Catalog, 9 units (not used above) from the following classes: ACCT 101, BA 100, BA 101, BA 104, BA 106, BA 108, BA 109, BA 110, BA 116, BA 121, BA 124, BA 125, BA 126, BA 152, BA 153, BA 155, BA 173, BA 204, BA 205, BA 208, BA 233, ECON 201, or ECON 201M, ECON 202 or ECON 202M, any additional courses to reach a minimum of 60 degree applicable units.

Plan B: To obtain a Plan B Associates in Arts Degree, complete the Small Business Management/Entrepreneurship Certificate of Achievement classes, the General Education (GE) requirement for Plan B (CSU) in the Cerritos College Catalog, and any additional courses to reach a minimum of 60 degree applicable units.

Plan C: To obtain a Plan C Associates in Arts Degree, complete the Small Business Management/Entrepreneurship Certificate of Achievement classes, the General Education (GE) requirements for Plan C Intersegmental General Education Transfer Curriculum (IGETC) for transfer to UC and CSU in the Cerritos College Catalog, and any additional courses to reach a minimum of 60 degree applicable units.

COMPOSITE INSPECTION CERTIFICATE OF ACHIEVEMENT

The Plastic Manufacturing Technology Program provides the diverse student body in the surrounding regional community with advanced education in plastic manufacturing technology and serves as a bridge between students who seek job skills, industry certifications or a Certificate of Achievement for employment. The Program provides a high quality of instruction to achieve its objectives.

The Certificate of Achievement in Composite Inspection allows the student to learn basic composite fabrication, processing, dimensioning, tolerancing, testing, measuring, and computer assisted inspecting, in the PMT, MTT, and ENGT departments. The student is able to benefit from the cooperation of those three departments to get the best possible knowledge of composite inspection. Students who complete this certificate are well positioned for both composite and plastic projects inspection.

		Units
PMT 51	Composites Fabrication	2.5
PMT 61	Fiberglass Technology	2.5
PMT 67	Fiberglass Production	2.5
PMT 68	Plastics Materials and Processes	2.5
ENGT 116	Blueprint Reading	2.0
ENGT 117	Geometrical Dimensioning and Tolerancing	2.0
MTT 56	CNC Shop Inspection	2.0
MTT 68	Computer-Assisted Inspection Using Verisurf	2.0
MFGT 54	Ultrasonic Level I Testing	1.5
Total Units		19.5

COMPOSITES MANUFACTURING CERTIFICATE OF ACHIEVEMENT

The Plastic Manufacturing Technology Program provides the diverse student body in the surrounding regional community with advanced education in plastic manufacturing technology and serves as a bridge between students who seek job skills, industry certifications or a Certificate of Achievement for employment. The Program provides a high quality of instruction to achieve its objectives.

The Certificate of Achievement in Composites Manufacturing allows the student to learn specific techniques related to composite fabrication, fiberglass technology, resin transfer, and how to repair potential manufacturing defects. The student also learns the basics of plastics technology and how this relates to blueprints prepared by engineers.

		Units
PMT 51	Composites Fabrication	2.5
PMT 53	Composites Repair	3.0
PMT 61	Fiberglass Technology	2.5
PMT 63L	Specialty Plastics Lab	0.5
PMT 67	Fiberglass Production	2.5
PMT 76	Vacuum Infusion Process (VIP)/Resin Transfer Molding	3.0
PMT 100	Plastics Technology	2.5
ENGT 116	Blueprint Reading	2.0
Total Units		18.5

ECONOMICS

ASSOCIATE IN ARTS DEGREE IN ECONOMICS FOR TRANSFER (AA-T)

Economics is essential for the understanding of our society. It is the study of how we make choices as individuals and as a society. This study of choices concerns decisions such as what we consume in our everyday lives, how we produce a variety of goods of services and to whom we distribute these products. In pursuing the Associate in Arts in Economics for Transfer (AA-T) degree, students will learn to use theoretical models and empirical evidence to explain the behavior of individuals, firms and nations insofar as it relates to the core elements of an economy -consumption, production and distribution. Students majoring in economics develop analytical, critical thinking, and problem solving and communication skills.

MAJOR REQUIREMENTS (Core, List A and List B):

REQUIRED CORE COURSES (14 units):

		UNITS
ECON 201M	Principles of Macroeconomics	3
ECON 202M	Principles of Microeconomics	3
MATH 112	Elementary Statistic	4
or PSYC 210	Elementary Statistics	(4)
MATH 116	Calculus for Managerial-Biological-Social Sciences	4
or MATH 170	Analytical Geometry and Calculus I	(4)

LIST A – Select 1 course (3-4 units):

MATH 115	Finite Mathematics	4
MATH 190	Analytical Geometry and Calculus I	4
ACCT 101	Fundamentals of Accounting I	4
ACCT 102	Fundamentals of Accounting II	4
CIS 101	Introduction to Computer Information Systems	3
BCOT 247	Managerial Business Communications	3

LIST B – Select 1 course (3-5 units):

ECON 101	Economic Issues and Policy	3
or ECON 102	Women in Global Economy	(3)
or ECON 204	Money, Ethics and Economic Justice	(3)
MATH 225	Calculus III	5

Total Units for the Major: 20-23

Associate in Arts in Economics for Transfer Requirement:

(1) Complete 60 semester units or 90 quarter units which are eligible for transfer to the California State University (CSU) system, including both of the following: (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements. (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district. (2) Obtain a minimum grade point average of 2.0. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis.

**ENGINEERING
ASSOCIATE OF SCIENCE DEGREE**

An associate of science degree in engineering provides students with an introductory knowledge of physics and math and provides the skills necessary to pursue upper-division coursework at a four-year university as well as the experience needed for undergraduate research and entry-level internships. The degree program is composed of some common courses that are consistent with the transfer requirements to both UC and CSU systems and some elective and specialty courses that allow the student to tailor the degree to match the specific requirements of his or her transfer institution. This enables efficient completion of the A.S. degree while simultaneously completing transfer requirements, thus promoting timely completion of a bachelor's degree in any of the engineering disciplines (*e.g.*, mechanical, electrical, aerospace, civil, chemical, *etc.*).

MAJOR REQUIREMENTS

CHEM 111	General Chemistry	5
MATH 170	Analytic Geometry and Calculus I	4
MATH 190	Analytic Geometry and Calculus II	4
MATH 225	Calculus III	5
PHYS 201	Engineering Physics	4
PHYS 202	Engineering Physics	4
TOTAL DEGREE REQUIREMENTS		<hr/> 26

Complete 60 units to include: (1) the common lower-division requirements, (2) at least 3 classes from the common specialty elective list, and (3) the associate of science degree general education requirements.

**ENGINEERING: AEROSPACE AND MECHANICAL SPECIALTY
ASSOCIATE OF SCIENCE DEGREE**

An associate of science degree in engineering with a specialty in either aerospace or mechanical engineering provides students with an introductory knowledge of physics, chemistry, and math, and provides the skills necessary to pursue upper-division coursework at a four-year university as well as the experience needed for undergraduate research and entry-level internships. The degree program is composed of some common courses that are consistent with the transfer requirements to both UC and CSU systems and some elective and specialty courses that allow the student to tailor the degree to match some of the specific requirements of his or her transfer institution. This enables efficient completion of the A.S. degree while simultaneously completing transfer requirements, thus promoting timely completion of a bachelor's degree in either mechanical or aerospace engineering. It will take a minimum of 64 units to complete this degree.

CORE REQUIREMENTS

CHEM 111	General Chemistry	5
MATH 170	Analytic Geometry and Calculus I	4
MATH 190	Analytic Geometry and Calculus II	4
MATH 225	Calculus III	5
PHYS 201	Engineering Physics	4
PHYS 202	Engineering Physics	4

SPECIALTY REQUIREMENTS

Select three courses from the following:

CHEM 112	General Chemistry	5
CIS 180	Programming in C/C++	3
ENGR 110	Introduction to Engineering	2
ENGR 112	Engineering Graphics	3
ENGR 235	Statics	3
ENGT 131	Design Fundamentals Including 3D Modeling	3
ENGT 138	Introduction to Engineering Design Using AutoCAD	4
MATH 250	Linear Algebra and Differential Equations	5
PHYS 203	Engineering Physics	4

TOTAL UNITS FOR THE MAJOR 34-40

Completion of a minimum of 60 semester-units to include (1) the courses listed above, (2) the A.A. degree general education requirements, and (3) a grade of "C" or better in all courses required for the major.

KINESIOLOGY

ASSOCIATE IN ARTS DEGREE IN KINESIOLOGY FOR TRANSFER (AA-T)

An Associate Degree in Kinesiology for transfer provides students with an introductory knowledge of the fundamental principles of kinesiology including the historical development of physical education and sport in our society. Students will gain theoretical and scientific knowledge about the body, including the skeletal and muscular systems. Additionally, students will learn and execute motor/sports skills appropriate for personal development as well as proficiency in discussing the benefits of an active lifestyle. Students will display professionalism and communication/presentation skills with preparedness for transfer. This program is for seamless transfer to CSU.

REQUIRED CORE COURSES: 14 Units		UNITS
KIN 100	Introduction to Kinesiology	3
A&P 150	Introduction to Human Anatomy	4
A&P 151	Introduction to Human Physiology	4

Movement Based Courses - Select a maximum of one (1) course from any three (3) of the following areas for a minimum of three units:
Aquatics, Combatives, Team Sports, Individual Sports, Fitness, Dance

Aquatics

PEX 105	Adapted Swimming	1
PEX 184	Swimming, Novice	1
PEX 185	Swimming, Beginning	1
PEX 284	Swimming, Intermediate	2
PEX 285	Swimming, Advanced	2

Combatives

PEX 147	Personal Self Defense	1
PEX 149	Tae Kwon Do, Beginning	1
PEX 249	Tae Kwon Do, Intermediate/Advanced	2

Dance

DANC 106A	Beginning Ballet	2
DANC 106B	Intermediate Ballet	2
DANC 108A	Dance, Modern, Beginning	2
DANC 108B	Dance, Modern, Intermediate	2
DANC 108C	Dance, Modern, Advanced	2
DANC 109	Introduction to Dance Cultures of the World	2
DANC 112	Dance, Contemporary Modern	2
DANC 121	Latin Social Dance	2
DANC 122	Middle Eastern Dance	2
DANC 123	African Dance	2
DANC 124	Hip Hop Dance	2
DANC 125	Introduction to Ballroom Dance	2
DANC 140	Beginning Jazz Dance	2
DANC 142	Beginning Tap Dance	2

Fitness

PEX 102	Adapted Cardiovascular Exercise	1
PEX 103	Adapted Strength Training	1
PEX 110	Aerobic Activities	1.5
PEX 111	Low Impact Aerobics	1.5
PEX 112	Step Aerobics	1.5
PEX 116	Water Aerobics	1
PEX 124	Personal Fitness Program	1
PEX 138	Walking for Fitness	1
PEX 141	Jogging for Fitness, Beginning	1

PEX 145	Circuit Weight Training, Beginning	1
PEX 151	Yoga	1
PEX 152	Restorative Yoga	1
PEX 156	Pilates Conditioning	1
PEX 126	Physical Fitness Training	1
PEX 245	Circuit Weight Training, Intermediate/Advanced	2

Individual Sports

PEX 101	Adapted Wheelchair Activities	1
PEX 161	Badminton, Beginning	1
PEX 176	Golf, Beginning	1
PEX 188	Tennis, Introduction	1
PEX 189	Tennis, Beginning	1
PEX 261	Badminton, Intermediate/Advanced	2
PEX 276	Golf, Intermediate/Advanced	2
PEX 288	Tennis, Intermediate	2
PEX 289	Tennis, Advanced	2

Team Sports

PEX 163	Baseball, Beginning	1
PEX 165	Basketball, Novice	1
PEX 166	Basketball, Beginning	1
PEX 172	Flag Football	1
PEX 178	Soccer, Beginning	1
PEX 181	Softball, Beginning	1
PEX 191	Volleyball, Introduction	1
PEX 192	Volleyball, Beginning	1
PEX 263	Baseball, Intermediate/Advanced	2
PEX 265	Basketball, Intermediate	2
PEX 266	Basketball, Advanced	2
PEX 278	Soccer, Intermediate/Advanced	2
PEX 281	Softball, Intermediate/Advanced	2
PEX 291	Volleyball, Intermediate	2
PEX 292	Volleyball, Advanced	2

LIST A: (Select 2) 7-9 Units

HED 110	Community First Aid and CPR	3
MATH 112	Elementary Statistics	4
or PSYCH 210	Elementary Statistics	(4)
CHEM 100	Introductions to Chemistry	4
or CHEM 111	General Chemistry	(5)
PHYS 101	General Physics	4
or PHYS 201	Engineering Physics	(4)

TOTAL Units for the Major:	21-27
Total Units that may be double-counted:	6-10

ASSOCIATE IN ARTS IN KINESIOLOGY FOR TRANSFER REQUIREMENTS:

Complete the following (1) 60 semester or 90 quarter CSU transferable units (2) The California State University-General Education-Breadth pattern (CSU GE-Breadth); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern (3) A minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district (4) Obtainment of a minimum grade point average (GPA) of 2.0 (5) Earn a grade of "C" or better in all courses required for the major or area of emphasis.

**MACHINE TOOL TECHNOLOGY – NUMERICAL CONTROL TOOL PROGRAMMER OPTION
CERTIFICATE OF ACHIEVEMENT**

The Department aims to provide basic to advanced training in manual or conventional machining, computer numerical programming and operation, advanced multi-axis programming and operation. These form the fundamental skills necessary for the average and expected workload in the machining industry. Enrolled students are strongly positioned for employment in the machining industry throughout the course of the Program.

ENGT 116	Blueprint Reading	2.0
ENGT 117	Geometrical Dimensioning and Tolerancing	2.0
MTT 51	MasterCam Milling	3.5
MTT 52	Setup and Operation of CNC Milling Machines	2.5
MTT 56	CNC Shop Inspection	2.0
MTT57	Setup and Operation of CNC Lathes	2.5
MTT 59	MasterCam Turning	2.5
MTT 71	MasterCam Multi-Axis Milling	2.0
MTT 72	MasterCam Multi-Axis Turning	2.0
MTT 91L	CNC Mill Machining Laboratory	1.0
MTT 95L	CNC Lathe Machining Laboratory	1.0
MTT 180	Robotics for CNC Machines	3.0
MTT 278	MasterCam Advanced	3.5
Total Units		29.5

MUSIC

ASSOCIATE IN ARTS DEGREE IN MUSIC FOR TRANSFER (AA-T)

This degree is for seamless transfer to a CSU.

REQUIRED CORE: (16 UNITS) UNITS

MUS 180	Music Theory/Musicianship I	4
MUS 181	Music Theory/Musicianship II	4
MUS 280	Music Theory/Musicianship III	4
MUS 281	Music Theory/Musicianship IV	4

APPLIED MUSIC: (4 UNITS)

MUS 148	Private Study/Technique	1
MUS 149	Private Study/Musical Preparation	1
MUS 150	Private Study/Performance Practice	1
MUS 151	Private Study/Recital Preparation	1

ENSEMBLE: (a combination of 4 units from the following courses)

(all courses are repeatable)

MUS 200E	Beginning Band	(1)
MUS 201E	Concert Band	(1)
MUS 202E	Community Symphonic Band	(1)
MUS 203E	Community Band	(1)
MUS 204E	Orchestra	(1)
MUS 205E	Community Orchestra	(1)
MUS 206E	Stage Band	(1)
MUS 207E	Jazz Ensemble	(1)
MUS 208E	Pop/Rock Latin Ensemble	(1)
MUS 210E	String Ensemble	(1)
MUS 216E	Piano Ensemble	(1)
MUS 217E	Guitar Ensemble	(1)
MUS 219E	Collegiate Chorale	(1)

TOTAL UNITS FOR THE MAJOR ARTS IN MUSIC 24

ASSOCIATE IN ARTS IN MUSIC FOR TRANSFER REQUIREMENTS

Complete the following (1) 60 semester or 90 quarter CSU – transferable units (2) The California State University-General Education-Breadth pattern (CSU GE-Breadth); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern (3) A minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district (4) Obtainment of a minimum grade point average (GPA) of 2.0 (5) Earn a grade of “C” or better in all courses required for the major or area of emphasis.

**NETWORK/SYSTEMS ADMINISTRATION
ASSOCIATE OF ARTS DEGREE**

The network/systems administration program at Cerritos College is designed to prepare students for a career in the information industry.

Graduates of the program will have a comprehensive understanding of the current communication technologies and commonly used operating systems, will be equipped with the knowledge and skills needed to design and implement a network infrastructure, and will be able to deploy and administer multiple systems in an organization.

The graduates of the program have possible career opportunities including the following occupations: entry-level technical support technician, system administrator, network technician, network administrator, and network engineer.

REQUIRED COURSES	UNITS
CIS 170A Networking Fundamentals	3.5
CIS 170E Router Configurations and Protocol	3.5
CIS 170F Advanced Switching and Routing	3.5
CIS 170G Wide Area Networks	3.5
CIS 170H TCP/IP Fundamentals	3
CIS 170K Introduction to Wireless Networking	3
CIS 200A Apple Mac OS Support Essentials	3.5
CIS 212 Introduction to Microsoft Windows Administration	3.5
CIS 213F Microsoft Windows Server Administration	3.5
CIS 214 Unix and Linux Operating Systems	3
	—
	33.5

Choose 3.5 units from the following courses:

CIS 103 Computer Programming Logic	3.5
CIS 170B Network+ Certification	3.5
CIS 170L Cybersecurity Fundamentals	3.5
	—
TOTAL CERTIFICATE REQUIREMENTS	37

ASSOCIATE OF ARTS DEGREE REQUIREMENTS

Meet the requirements of a certificate of achievement in computer and information sciences network systems/administration and complete general education requirements and electives to achieve a minimum of 60 units.

**NETWORK/SYSTEMS ADMINISTRATION
CERTIFICATE OF ACHIEVEMENT**

The network/systems administration program at Cerritos College is designed to prepare students for a career in the information industry by offering training on the cutting-edge skills and knowledge sought by the industry, aiming to provide students with opportunities for career change or advancement.

Graduates of the program will have a comprehensive understanding of the current communication technologies and commonly used operating systems, will be equipped with the knowledge and skills needed to design and implement a network infrastructure, and will be able to deploy and administer multiple systems in an organization.

The graduates of the program have possible career opportunities including the following occupations: entry-level technical support technician, system administrator, network technician, network administrator, and network engineer.

REQUIRED COURSES	UNITS	
CIS 170A	Networking Fundamentals	3.5
CIS 170E	Router Configurations and Protocol	3.5
CIS 170F	Advanced Switching and Routing	3.5
CIS 170G	Wide Area Networks	3.5
CIS 170H	TCP/IP Fundamentals	3
CIS 170K	Introduction to Wireless Networking	3
CIS 200A	Apple Mac OS Support Essentials	3.5
CIS 212	Introduction to Microsoft Windows Administration	3.5
CIS 213F	Microsoft Windows Server Administration	3.5
CIS 214	Unix and Linux Operating Systems	3
		—
		33.5
Choose 3.5 units from the following courses:		
CIS 103	Computer Programming Logic	3.5
CIS 170B	Network+ Certification	3.5
CIS 170L	Cybersecurity Fundamentals	3.5
		—
TOTAL CERTIFICATE REQUIREMENTS		37

**PARALEGAL
ASSOCIATE IN ARTS DEGREE**
(MINIMUM OF 33 UNITS REQUIRED)

SECTION A

Paralegal Core Requirements for AA Degree Candidates

		UNITS
LAW 56	Introduction to Computerized Legal Software	3
LAW 100*	Introduction to California Civil Procedures	3
LAW 101	Introduction to Law	3
LAW 102*	Advanced California Civil Procedures	3
or LAW 113*	Fundamentals of Alternate Dispute Resolutions	(3)
LAW 103*	Legal Research	3
LAW 111	Business Law	3
LAW 120*	Legal Ethics	3
LAW 290*	Capstone Course — Paralegal Program	1
TOTAL REQUIREMENTS FOR SECTION A		22

SECTION B

Elective Courses

Select an additional 11.0 units from the courses listed below in section B, six of which must be courses marked with an asterisk (*). If either LAW 102 or LAW 103 is applied in Section A, the same course cannot be applied to Section B.

LAW 52	Law Office Management	3
LAW 57	Legal Document Production	3
LAW 65*	Advanced Legal Technology	3
LAW 102*	Advanced California Civil Procedures	3
LAW 104*	Advanced Legal Research	3
LAW 105*	Introduction to Federal & California Employment, Labor, & Workers' Compensation Law	3
LAW 106*	Bankruptcy Law	3
LAW 107*	Probate Procedures	3
LAW 108*	Family Law Procedures	3
LAW 109*	Torts & Personal Injury Law and Procedures	3
LAW 110	Business Law	3
LAW 112*	Estate Planning for the Paralegal	3
LAW 113*	Fundamentals of Alternate Dispute Resolutions	3
LAW 114	Law on the Internet	3
LAW 115*	Elder Law	3
LAW 116*	Criminal Law	3
LAW 119	Legal Aspects of Mass Communications	1
LAW 171-174*	Legal Occupational Work Experience	1-4
LAW 220*	Landlord & Tenant Law	3
LAW 150*	Intellectual Property Law	3
LAW 260*	Immigration Law	3
TOTAL REQUIREMENTS:		33

*Denotes legal specialty courses. The ABA requires a minimum of 18 units of legal specialty courses for AA degree candidates.

AA Degree Candidates must complete a total of 22.0 units of Core Requirements, 6.0 units of Legal Specialty courses designated by an (*) in Section "B", and 5.0 units of any other courses from Section "B".

Complete the 33.0 units for the major listed above, General Education requirements and additional degree-applicable electives as needed to total a minimum of 60 units. No course may be taken as "Credit by Exam."

This program is approved by the American Bar Association (ABA)

Department Recommendation: It is strongly recommended that all graduates who wish to be assisted with job placement through the Law department complete LAW 171-174 Legal Occupational Work Experience with a letter of recommendation from their employer.

Note: Paralegal means a person who holds himself or herself out to be a paralegal, who is qualified by education, training, or work experience, who either contracts with or is employed by an attorney, law firm, corporation, government agency, or other entity, and who performs substantial legal work under the direction and supervision of an active member of the State Board of California. A paralegal shall not provide legal advice or engage in conduct that constitutes the unauthorized practice of law (Business & Professional Code Section 6450).

The Legal Minor does not prepare students for a career as a Paralegal and is not approved by the American Bar Association.

**PARALEGAL
CERTIFICATE OF ACHIEVEMENT**

SECTION A

Paralegal Core Requirements for Paralegal Certificate Candidates

		UNITS
LAW 56	Introduction to Computerized Legal Software	3
LAW 100*	Introduction to California Civil Procedure	3
LAW 101	Introduction to Law	3
LAW 102*	Advanced California Civil Procedure	3
or LAW 113*	Fundamentals of Alternate Dispute Resolutions	(3)
LAW 103*	Legal Research	3
LAW 111	Business Law	3
LAW 120*	Legal Ethics	3
LAW 290*	Capstone Course – Paralegal Program	1
		—
TOTAL REQUIREMENTS FOR SECTION A:		22

SECTION B

Must complete 6 additional units from the list below of which all must be courses marked with an asterisk (*). If LAW 102 or LAW 113 is applied in Section “A,” the same course cannot be applied for Section “B.” Students are entitled and encouraged to take additional elective courses in addition to the minimum required.

		UNITS
LAW 52	Law Office Management	3
LAW 57	Legal Document Production	3
LAW 65*	Advanced Legal Technology	3
LAW 102*	Advanced California Civil Procedures	3
LAW 104*	Advanced Legal Research	3
LAW 105*	Introduction to Federal & California Employment, Labor, & Workers' Compensation Law	3
LAW 106*	Bankruptcy Law	3
LAW 107*	Probate Procedures	3
LAW 108*	Family Law Procedures	3
LAW 109*	Torts & Personal Injury Law and Procedures	3
LAW 110	Business Law	3
LAW 112*	Estate Planning for the Paralegal	3
LAW 113*	Fundamentals of Alternate Dispute Resolutions	3
LAW 114	Law on the Internet	3
LAW 115*	Elder Law	3
LAW 116*	Criminal law	3
LAW 119	Legal Aspects of Mass Communications	1
LAW 150*	Intellectual Property Law	3
LAW 160	California Workers' Compensation Law	3
LAW 171-174*	Legal Occupational Work Experience	1-4
LAW 220*	Landlord & Tenant Law	3
LAW 230*	Corporate Law	3
LAW 260*	Immigration Law	3
		—
TOTAL REQUIREMENTS FOR SECTION B:		6

*Denotes legal specialty courses. The ABA requires a minimum of 18 units of legal specialty courses for certificate candidates.

Certificate Candidates: Must complete a total of 22.0 units of Core Requirements (Section “A”) and 6.0 units of Legal Specialty courses designated by an * in Section “B” for a total of 28.0 units. If LAW 102 or LAW 113 is applied in Section “A,” the same course cannot be applied to Section “B” requirements. A student may earn a Paralegal Certificate if the student has already completed an AA degree or BA degree from an accredited college or university in the United States. Official transcripts must be provided to

admissions with proof of degree posted. Degrees earned from international colleges or universities must be evaluated by a Cerritos College-approved international evaluation service.

All 28.0 units must be taken at Cerritos College. Students must consult with the Counseling Department prior to entering the Certificate Program to verify eligibility. All Law courses that were taken prior to the completion of the student's requisite A.A. or higher Degree will not be counted as part of the certificate units. No course may be taken as "Credit by Exam."

This program is approved by the American Bar Association (ABA)

Department Recommendation: It is strongly recommended that all graduates who wish to be assisted with job placement through the Law department complete LAW 171-174 Legal Occupational Work Experience with a letter of recommendation from their employer. Curriculum and Requirements for Majors and Certificates Cerritos College • 2017-2018 Catalog 123

Note: Paralegal means a person who holds himself or herself out to be a paralegal, who is qualified by education, training, or work experience, who either contracts with or is employed by an attorney, law firm, corporation, government agency, or other entity, and who performs substantial legal work under the direction and supervision of an active member of the State Board of California. A paralegal shall not provide legal advice or engage in conduct that constitutes the unauthorized practice of law (Business & Professional Code Section 6450).

The Legal Minor does not prepare students for a career as a Paralegal and is not approved by the American Bar Association.

PLASTICS MANUFACTURING CERTIFICATE OF ACHIEVEMENT

The Plastic Manufacturing Technology Program provides the diverse student body in the surrounding regional community with advanced education in plastic manufacturing technology and serves as a bridge between students who seek job skills, industry certifications or a Certificate of Achievement for employment. The Program provides a high quality of instruction to achieve its objectives.

The Certificate of Achievement in Plastics Manufacturing allows the student to learn specific techniques related to composite and plastic manufacturing. It also prepares the student to inspect the raw material and the produced parts by having a clear understanding of dimensioning, tolerancing, and designing of plastic parts in the engineering design technology department.

		Units
PMT 51	Composites Fabrication	2.5
PMT 59	Injection Molding	2.5
PMT 63L	Specialty Plastics Lab	0.5
PMT 68	Plastics Materials and Processes	2.5
PMT 100	Plastics Technology	2.5
ENGT 116	Blueprint Reading	2.0
ENGT 117	Geometrical Dimensioning and Tolerancing	2.0
MTT 56	CNC Shop Inspection	2.0
NPD 103	Tooling and Materials for New Product Development	3.0
Total Units		19.5

**SPEECH LANGUAGE PATHOLOGY AIDE
CERTIFICATE OF ACHIEVEMENT**

One of the missions of the Cerritos College Speech Language Pathology Assistant (SLPA) Department is to prepare future Speech-Language Pathology Aides to meet the needs of diverse populations in a variety of therapeutic environments. Qualified SLP Aides can find employment in educational and/or clinical settings where they are supervised by a licensed speech-language pathologist.

Year 1/First Semester (Fall):

Courses		Units
CD 110	Child Development	3.0
SLP 101	Introduction to Communication Disorders	3.0
SLP 105	Speech and Language Development in Children	<u>3.0</u>
Semester total		9.0

Year 1/Second Semester (Spring):

Courses		Units
CD 139	Observation, Assessment, and Positive Guidance of Childhood Behavior	3.0
CDSE 150	Introduction to Children with Special Needs	3.0
SLP 125	Child Disorders and Treatment	<u>5.0</u>
Semester total		11.0

TOTAL CERTIFICATE REQUIREMENTS 20.0

THEATRE ARTS
ASSOCIATE IN ARTS DEGREE IN THEATRE ARTS FOR TRANSFER (AA-T)

Students wishing to earn the Associate in Arts Degree for Transfer in Theater Arts must complete the 18.5-19 units described below, the California State University General Education Breadth pattern (Plan B) or the Inter-Segmental General Education Transfer Curriculum (IGETC) pattern (Plan C), and additional transfer level electives as needed for a total of 60 transferable semester units. Students must maintain a minimum grade point average of 2.0 and earn a grade of C or better in all courses required for the major or area of emphasis.

Upon completion of the Associate in Arts Degree for Transfer in Theater Arts, students will have qualified coursework for transfer into the California State University System with a general education and lower division theatre arts background that will enable them to directly transition into the CSU upper division theatre courses required for their four year degree.

CORE COURSES: A minimum of 9.5 units

TH 101	Introduction to the Theater	(3)
or		
TH 102	History of the Classical Theatre	(3)
TH 110	Fundamentals of Acting	(3.5)

Select a combination of 3 units from one of the following two groups:

TH 130	Rehearsal and Performance for the Minor Role	(1)
and TH 131	Rehearsal and Performance for the Supporting Role	(2)
or		
TH 132	Rehearsal and Performance for the Leading Role	(3)
or		
TH 133	Stage Crew Activity	(1)
and TH 134	Technical Production	(2)

LIST A: Select a minimum of 9 units from the following

TH 111	Intermediate Acting to Characterization	(3.5)
TH 222	Stage Lighting	(3)
TH 221	Costuming for the Stage	(3)
TH 123	Stage Make-up	(3)
TH 120	Theatre Stagecraft	(3)

Associate degree for transfer completion requirements:

- 60 semester or 90 quarter CSU-transferable units.
- the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
- a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.
- obtainment of a minimum grade point average (GPA) of 2.0.
- earn a grade of C or better in all courses required for the major or area of emphasis.

WOODWORKING MANUFACTURING TECHNOLOGY - CABINETMAKING CERTIFICATE OF ACHIEVEMENT

The Department of Woodworking Manufacturing Technologies provides students with high quality woodworking education leading to job opportunities in the wood industry. Vocational programs in both cabinetmaking and furniture making are offered. Certificates and degrees are available in General Woodworking, Cabinetmaking, Furniture Making, and CNC Woodworking.

WMT Basic Core Courses		UNITS
WMT 151	Introduction to Faceframe Cabinetmaking	4
WMT 153	32mm System of Cabinetmaking	4
WMT 155	Architectural Millwork	4
WMT 181	Introduction to Computer Operations for Cabinetmaking and Design	3
or WMT 185	Alphacam for CNC Woodworking	(3)
WMT 250	Intermediate Faceframe Cabinetmaking	4
or WMT 252	Intermediate 32mm System Cabinetmaking	(4)
WMT 291	Production Cabinetmaking	4
or WMT 292	Production – Special Projects	(4)

Choose from the following for a minimum of four (4) units:

WMT 80	Running a Woodworking Business	3
WMT 107	Wood Finishing	3
WMT 144	Jigs and Fixtures	2
WMT 157	Passage Door	4
WMT 184	Introduction to Digital Fabrication	3
WMT 186	CNC Router for Woodworking	3
WMT 189L	CNC Woodworking Lab	2.5
WMT 285	Intermediate AlphaCAM for CNC Woodworking	3
WMT 286	Intermediate CNC Router for Woodworking	3
WMT 287	5-Axis CNC Woodworking	3
WMT 289L	Intermediate CNC Woodworking Lab	2.5
Total Certificate Units		27-30

RECOMMENDED ELECTIVES:

WMT 80	Running A Woodworking Business	3
WMT 258	Mantels and Wall Systems	4

The Department of Woodworking Manufacturing Technologies provides students with high quality woodworking education leading to job opportunities in the wood industry. Vocational programs in both cabinetmaking and furniture making are offered. Certificates and degrees are available in General Woodworking, Cabinetmaking, Furniture Making, and CNC Woodworking.

The Cabinetmaking program option prepares students for employment in the woodworking industry, primarily in cabinet shops. Through courses focusing on different forms of cabinetmaking, including casegoods, faceframe, and CNC, students learn how to use traditional woodworking machinery and hand tools as well as CNC machines. Core topics include CNC and cabinetmaking as well as design. Electives include wood finishing, veneering, and running a woodworking business. Graduates are employed as cabinetmakers, general woodworkers, CNC operators, or are self-employed. Spatial intelligence, cognitive ability, and hand-eye coordination are recommended for those entering the program.

WOODWORKING MANUFACTURING TECHNOLOGY – FURNITURE MAKING CERTIFICATE OF ACHIEVEMENT

The Department of Woodworking Manufacturing Technologies provides students with high quality woodworking education leading to job opportunities in the wood industry. Vocational programs in both cabinetmaking and furniture making are offered. Certificates and degrees are available in General Woodworking, Cabinetmaking, Furniture Making, and CNC Woodworking.

The Furniture Making program option prepares students for employment in the woodworking industry, primarily in custom furniture shops. Through courses focusing on tables, casegoods, and other forms, students learn how to use traditional woodworking machinery and hand tools. Core topics include furniture design and finishing. Electives include advanced casegoods, advanced tables, advanced hand-tool topics, veneering, and SketchUp. Graduates are employed as furniture makers, general woodworkers, or are self-employed. Spatial intelligence, cognitive ability, and eye-hand coordination are recommended for those entering the program.

CERTIFICATE OF ACHIEVEMENT REQUIREMENTS

WMT Basic Core Courses		UNITS
WMT 101	Introduction to Woodworking	3
WMT 102	Introduction to Solid Wood Casegoods	4
WMT 103	Introduction to Tables	4
WMT 107	Wood Finishing	3
WMT 130	Furniture Design	3
WMT 201	Woodworking with Hand Tools	4

Choose from the following for a minimum of nine (4) units:

WMT 108	Wood Carving for Furniture	2.5
WMT 117	Woodworking Appreciation	1
WMT 118	Introduction to Woodturning	2
WMT 132	Chair Design and Construction	4
WMT 144	Jigs and Fixtures	2
WMT 185	CNC Woodworking	4
WMT 202	Advanced Furniture Casegoods	4
WMT 204	Advanced Tables	4
WMT 205	Veneering and Marquetry	4
WMT 211	The Workbench Class	4
WMT 221	Advanced Handtools – Handplanes	3
or WMT 222	Advanced Handtools – Joinery	3
or WMT 223	Advanced Handtools – Layout Tools	3
or WMT 224	Advanced Handtools – Dovetails	3
WMT 231	Outdoor Seating	4
WMT 232	Chair Design and Construction	4
WMT 233	Morris Chair	4
WMT 235	Windsor Chair	3
WMT 237	Traditional American Furniture	4
WMT 244	Chest of Drawers	4
WMT 245	Curved and Tapered Forms for Furniture	4
Total Certificate Units		25