



EL CAMINO COLLEGE

2016-2017 | CATALOG
ADDENDUM



El Camino Community College District A Public Community College

Serving: El Segundo, Hawthorne, Hermosa Beach, Inglewood,
Lawndale, Lennox, Manhattan Beach, Redondo Beach, and Torrance

Address

El Camino College • 16007 Crenshaw Boulevard, Torrance, CA 90506-0001

Telephone Numbers

1-866-ELCAMINO or 310-532-3670
Admissions: 310-538-5700
Telecommunications for the Deaf: (TDD) 310-660-3445

Website

www.elcamino.edu

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Associate of Arts Degree

A.A. Degree Requirements

Section A - General Education Requirements

A student has three options to complete the General Education Requirements.

OPTION I is designed for students completing the El Camino College major.

OPTION II is designed for students completing CSU GE Breadth transfer requirements.

OPTION III is designed for students completing CSU/UC (IGETC) transfer requirements.

OPTION I: EL CAMINO COLLEGE REQUIREMENTS

Complete the specified number of units in categories 1 through 5 and the mathematics competency requirement in category 6.

1. NATURAL SCIENCES:

minimum 3 semester units

Anatomy 30, 32
 Anatomy and Physiology 34A, 34B
 Anthropology 1, 5
 Astronomy 12, 20, 20H, 25
 Biology 8, 10, 10H, 11, 12, 15, 16, 17, 18, 101, 102, 103
 Chemistry 1A, 1B, 4, 7A, 7B, 20, 21A, 21B
 Geography 1, 6, 9
 Geology 1, 2, 3, 4, 6, 15, 30, 32, 34, 36
 Microbiology 33
 Oceanography 10, 10H
 Physical Science 25
 Physics 1A, 1B, 1C, 1D, 2A, 2B, 3A, 3B, 11, 12
 Physiology 31
 Psychology 7

2. SOCIAL AND BEHAVIORAL SCIENCE:

minimum 9 semester units

One course from A, one course from B, and one course from C:

- A. American Studies 7
 History 101, 102, 105, 106, 108, 110, 111, 112, 122, 128
 Women's Studies 1
- B. Philosophy 117
 Political Science 1, 5, 6, 7
- C. Anthropology 2, 3, 4, 6, 7, 8, 9, 11, 12
 Business 17, 22
 Child Development 103, 104
 Communication Studies 260, 265, 270
 Economics 1, 2, 5
 Ethnic Studies 1, 3, 5
 Film/Video 100
 Geography 2, 5, 7
 History 129, 140, 141, 143, 145, 152, 154, 162, 163, 175, 176, 178, 183, 184
 Journalism 12
 Philosophy 117
 Political Science 2, 3, 7, 10
 Psychology 2, 5, 7, 8, 10, 12, 15, 16, 17
 Sociology 101, 102, 104, 107, 108, 112

3. HUMANITIES:

minimum 3 semester units

Architecture 104
 Art 101, 102A, 102B, 102C, 106, 109, 150, 205A, 205B, 207, 208, 208H, 209
 Chinese 1, 2, 3, 24
 Communication Studies 250
 Dance 101, 103
 English 1B, 1BH, 12, 15A, 15B, 20, 21, 27, 28, 30, 31, 34, 35, 36, 39, 40A, 40B, 41B, 42, 43, 44, 48
 Fashion 31
 Film/Video 105, 110, 113, 114, 153, 154
 French 1, 2, 3, 4, 5, 6
 German 1, 2
 Humanities 1
 Italian 1, 2, 24
 Japanese 1, 2, 3, 4, 25
 Music 101, 111, 112, 113, 116, 117, 215A, 215B
 Philosophy 101, 103, 107, 111, 112, 113, 114, 115, 117, 120
 Photography 150
 Political Science 7
 Sign Language/Interpreter Training 111, 112, 113, 114, 115, 130
 Spanish 1, 2, 3, 4, 5, 6, 52A, 52B
 Theatre 103, 104, 113

4. LANGUAGE AND RATIONALITY:

minimum 6 semester units

One course from A and one course from B:

A. English Composition:

minimum 3 semester units

Business 27, 28
 English 1A, 1AH
 Journalism 1

B. Communication and Analytical Thinking:

minimum 3 semester units

Business 29
 Communication Studies 100, 120, 130, 140, 260, 265, 270
 Computer Information Systems 13, 16, 80
 Computer Science 1, 14
 English 1B, 1BH, 1C, 1CH
 Journalism 12
 Mathematics 73, 80, 110, 111, 115, 116, 120, 130, 140, 150, 160, 161, 165, 170, 180, 190, 191, 210, 220, 270
 Philosophy 105, 106
 Psychology 3, 9A
 Sociology 109
 Supervision 27

5. HEALTH AND PHYSICAL EDUCATION:

minimum 3 semester units

Contemporary Health 1, 5
 Human Development 110, 115
 Nutrition and Foods 11
 Psychology 2, 16
 Physical Education 260

Physical Activity or Fitness Courses:

Dance 110, 120A, 120B, 130A, 130B, 140, 161, 162, 164, 165, 167, 168, 171A, 220A, 221, 230A, 240, 250, 261, 262, 265, 268, 271A

Physical Education 2, 3, 4, 5abc, 6abc, 7, 10, 15abc, 16abc, 18, 20abc, 21abc, 35abc, 36abc, 45abc, 46abc, 47, 54, 57abc, 58abc, 60abc, 61abc, 65abc, 66abc, 70abc, 71abc, 74, 75abc, 76abc, 80abc, 81abc, 85abc, 86abc, 87abc, 105abc, 106abc, 110abc, 111abc, 115abc, 116abc, 120abc, 121abc, 132abc, 133abc, 135abcd, 140abc, 204, 208, 221, 224, 233, 234ab, 240, 241, 244, 245, 249, 250, 251, 253, 254, 255, 257, 258, 259, 275, 280, 400, 401, 402, 404, 407, 409

(This category may be exempted by one of the following:

- 1) Pass the Contemporary Health waiver exam; or
- 2) Approval of a petition for military service credit.)

6. MATHEMATICS COMPETENCY

Pass the Mathematics Competency Test (a process separate from mathematics placement), which covers intermediate algebra, or satisfactorily complete one of the approved courses for this category.

Mathematics 73, 80, 110, 111, 115, 116, 120, 130, 140, 150, 160, 161, 165, 170, 180, 190, 191, 210, 220, 270

Psychology 9A

Sociology 109

OPTION II: CSU GE BREADTH TRANSFER REQUIREMENTS

See pages 70-72 of this catalog.

OPTION III: CSU/UC (IGETC) TRANSFER REQUIREMENTS

See pages 71-73 of this catalog.

Section B - Major Requirements

Satisfy either the El Camino College Major option or the Transfer Major option.

El Camino College Major

Complete the courses specified for one of the majors listed alphabetically in Section IV, Curriculum, of this college catalog.

Transfer Major

Complete the lower division transfer major requirements for an accredited four-year college or university. If there are no lower division requirements in the transfer major or if the requirements for the transfer major are less than 18 units, students must complete an El Camino College major.

Section C - Electives**El Camino College Major**

To reach the total of 60 degree applicable units required for graduation, students must choose electives from degree applicable courses. Students may count only six units of physical education as elective credit for graduation.

Transfer Major

Sixty degree applicable units are required for graduation. To qualify for transfer to CSU or UC, electives must be chosen from transferable courses. Students may count only four units of physical education as transfer credit.

Associate of Science Degree

A.S. Degree Requirements

Section A - General Education Requirements

A student has three options to complete the General Education Requirements.

OPTION I is designed for students completing the El Camino College major.

OPTION II is designed for students completing CSU GE Breadth transfer requirements.

OPTION III is designed for students completing CSU/UC (IGETC) transfer requirements.

OPTION I: EL CAMINO COLLEGE REQUIREMENTS

Complete the specified number of units in categories 1 through 5 and the mathematics competency requirement in category 6.

1. NATURAL SCIENCES:

minimum 3 semester units

Anatomy 30, 32
 Anatomy and Physiology 34A, 34B
 Anthropology 1, 5
 Astronomy 12, 20, 20H, 25
 Biology 8, 10, 10H, 11, 12, 15, 16, 17, 18, 101, 102, 103
 Chemistry 1A, 1B, 4, 7A, 7B, 20, 21A, 21B
 Geography 1, 6, 9
 Geology 1, 2, 3, 4, 6, 15, 30, 32, 34, 36
 Microbiology 33
 Oceanography 10, 10H
 Physical Science 25
 Physics 1A, 1B, 1C, 1D, 2A, 2B, 3A, 3B, 11, 12
 Physiology 31
 Psychology 7

2. SOCIAL AND BEHAVIORAL SCIENCE:

minimum 3 semester units

One course from A or B, or C:

A. American Studies 7
 History 101, 102, 105, 106, 108, 110, 111, 112, 122, 128
 Women's Studies 1

B. Philosophy 117
 Political Science 1, 5, 6, 7

C. Anthropology 2, 3, 4, 6, 7, 8, 9, 11, 12
 Business 17, 22
 Child Development 103, 104
 Communication Studies 260, 265, 270
 Economics 1, 2, 5
 Ethnic Studies 1, 3, 5
 Film/Video 100
 Geography 2, 5, 7
 History 129, 140, 141, 143, 145, 152, 154, 162, 163, 175, 176, 178, 183, 184
 Journalism 12
 Philosophy 117
 Political Science 2, 3, 7, 10
 Psychology 2, 5, 7, 8, 10, 12, 15, 16, 17
 Sociology 101, 102, 104, 107, 108, 112

3. HUMANITIES:

minimum 3 semester units

Architecture 104
 Art 101, 102A, 102B, 102C, 106, 109, 150, 205A, 205B, 207, 208, 208H, 209
 Chinese 1, 2, 3, 24
 Communication Studies 250
 Dance 101, 103
 English 1B, 1BH, 12, 15A, 15B, 20, 21, 27, 28, 30, 31, 34, 35, 36, 39, 40A, 40B, 41B, 42, 43, 44, 48
 Fashion 31
 Film/Video 105, 110, 113, 114, 153, 154
 French 1, 2, 3, 4, 5, 6
 German 1, 2
 Humanities 1
 Italian 1, 2, 24
 Japanese 1, 2, 3, 4, 25
 Music 101, 111, 112, 113, 116, 117, 215A, 215B
 Philosophy 101, 103, 107, 111, 112, 113, 114, 115, 117, 120
 Photography 150
 Political Science 7
 Sign Language/Interpreter Training 111, 112, 113, 114, 115, 130
 Spanish 1, 2, 3, 4, 5, 6, 52A, 52B
 Theatre 103, 104, 113

4. LANGUAGE AND RATIONALITY:

minimum 6 semester units

One course from A and one course from B:

A. English Composition:

minimum 3 semester units

Business 27, 28
 English 1A, 1AH
 Journalism 1

B. Communication and Analytical Thinking:

minimum 3 semester units

Business 29
 Communication Studies 100, 120, 130, 140, 260, 265, 270
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minimum 3 semester units

Contemporary Health 1, 5
 Human Development 110, 115
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Physical Activity or Fitness Courses:

Dance 110, 120A, 120B, 130A, 130B, 140, 161, 162, 164, 165, 167, 168, 171A, 220A, 221, 230A, 240, 250, 261, 262, 265, 268, 271A

Physical Education 2, 3, 4, 5abc, 6abc, 7, 10, 15abc, 16abc, 18, 20abc, 21abc, 35abc, 36abc, 45abc, 46abc, 47, 54, 57abc, 58abc, 60abc, 61abc, 65abc, 66abc, 70abc, 71abc, 74, 75abc, 76abc, 80abc, 81abc, 85abc, 86abc, 87abc, 105abc, 106abc, 110abc, 111abc, 115abc, 116abc, 120abc, 121abc, 132abc, 133abc, 135abcd, 140abc, 204, 208, 221, 224, 233, 234ab, 240, 241, 244, 245, 249, 250, 251, 253, 254, 255, 257, 258, 259, 275, 280, 400, 401, 402, 404, 407, 409

(This category may be exempted by one of the following:

- 1) Pass the Contemporary Health waiver exam; or
- 2) Approval of a petition for military service credit; or
- 3) Completion of Nursing 151 and 155.)

6. MATHEMATICS COMPETENCY

Pass the Mathematics Competency Test (a process separate from mathematics placement), which covers intermediate algebra, or satisfactorily complete one of the approved courses for this category.

Mathematics 73, 80, 110, 111, 115, 116, 120, 130, 140, 150, 160, 161, 165, 170, 180, 190, 191, 210, 220, 270
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Transfer Major

Sixty degree applicable units are required for graduation. To qualify for transfer to CSU or UC, electives must be chosen from transferable courses. Students may count only four units of physical education as transfer credit.

Business

A.S. Degree and Certificates of Achievement

Business Division

www.elcamino.edu/academics/business

Business (emphasis in Business Management):

The program provides students with the opportunity to obtain a degree or certificate in business management. The student completing this program will have the ability to organize, operate, and manage business organizations, utilize human resources, improve working relationships, draft letters and reports, and speak in various business situations. Competency will be measured by examinations, presentations, projects, and case problems.

Preparation for the Business Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Business Management Major

A minimum of 12 units must be completed at El Camino College.

Course	Title
BUS 1A	Financial Accounting (4)
or	
BUS 11	Accounting for Small Business (3)
BUS 20	Business Management (3)
BUS 21	Human Resources Management (3)
BUS 22	Human Relations in Organizations (3)
BUS 25	Introduction to Business (3)
BUS 28	Written Business Communications (3)
BUS 29	Oral Business Communications (3)
LAW 5	Business Law (3)
CIS 13	Computer Information Systems (3)

Total Units: 27-28

Recommended Electives:

BUS 1B	Managerial Accounting (4)
BUS 17	Personal Finance (3)
BUS 19	Principles of Retailing Management (3)

Program Modification

Certificate of Achievement

A Certificate of Achievement in Business Management will be granted upon completion of all program requirements. A minimum of 12 units must be completed at El Camino College.

Business Management Certificate of Achievement

Course	Title
BUS 20	Business Management (3)
BUS 21	Human Resources Management (3)
BUS 22	Human Relations in Organizations (3)
BUS 25	Introduction to Business (3)
BUS 28	Written Business Communications (3)
BUS 29	Oral Business Communications (3)

Total Units: 18

For Gainful Employment program information for the Business program options offered at El Camino College, please visit the following link:

www.elcamino.edu/academics/business/businessmgmt

COMPUTER INFORMATION SYSTEMS

A.S. Degree and Certificates of Achievement

Business Division

www.elcamino.edu/academics/business

The program is intended for students interested in information systems and can lead to a degree or certificate of achievement, and career placement or advancement. A variety of courses will enable students to design graphical user interfaces, perform systems analysis, develop web pages, spreadsheets, and databases, and implement and maintain LANs (local area networks). Students will demonstrate their proficiency through performance in laboratory exercises and objective examinations. Program assessment is measured by program completion and periodic program review. The program leads to career opportunities as software specialists, web programmers, database developers, systems analysts, or network administrators.

Course Title

Required Core: 9 units

CIS 13	Computer Information Systems (3)
CIS 18	Systems Analysis and Design (3)
CIS 19	Internet, Security, and the Web (3)

6 units from:

CIS 26	Using Microsoft Excel (3)
CIS 28	Database Management using Microsoft Access (3)

or

CIS 140	Data Communications Cisco 1 (3)
CIS 141	Networking Microcomputers Cisco 2 (3)

Select one of the following groups of courses: 9-11 units

Help Desk:

BUS 27	Effective English for Business (3)
CIS 11	Help Desk Operations (3)
CIS 40	Personal Computer Operations (3)

Advanced Applications:

CIS 29	Advanced Database Applications (3)
CIS 80	Database Programming (4)

Networking:

CIS 40	Personal Computer Operations (3)
CIS 142	Local Area Network (LAN) Switching and Wireless Cisco 3 (3)
CIS 143	Accessing the WAN - Cisco 4 (3)

Programming:

CIS 16	Application Development and Programming Using Visual Basic.Net (3)
CIS 133	Mashup JavaScript, jQuery and AJAX (4)
CIS 134	ASP.NET with C# Business Web Programming (4)

Mobile and Web Programming:

CIS 30	Introduction to Electronic Commerce (3)
CIS 133	Mashup JavaScript, jQuery and AJAX (4)
CIS 134	ASP.NET with C# Business Web Programming (4)
CIS 136	Building Mobile Apps (3)

Total Units: 24-26

New Program

Certificates of Achievement

A Certificate of Achievement in Business Programming will be granted upon completion of all program requirements. A minimum of 15 units must be completed at El Camino College.

Business Programming Certificate of Achievement

Course Title

Required Core: 15 units

CIS 13	Computer Information Systems (3)
CIS 18	Systems Analysis and Design (3)
CIS 19	Internet, Security, and the Web (3)
CIS 28	Database Management using Microsoft Access (3)
CIS 30	Introduction to eCommerce (3)

7 units from:

CIS 16	Application Development and Programming Using Visual Basic.Net (3)
CIS 133	Mashup JavaScript, jQuery and AJAX (4)
or	
CIS 134	ASP.NET with C# Business Web Programming (4)
CIS 136	Building Mobile Apps (3)

Total Units: 22

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 15 units must be completed at El Camino College and a grade point average of "B" is necessary in the required 21-22 units.

Computer Systems Applications Certificate of Achievement

Course Title

Required Core: 15 units

CIS 13	Computer Information Systems (3)
CIS 18	Systems Analysis and Design (3)
CIS 19	Internet, Security, and the Web (3)
CIS 26	Using Microsoft Excel (3)
CIS 28	Database Management using Microsoft Access (3)

Programming: 3-4 units

CIS 16	Application Development and Programming Using Visual Basic.Net (3)
CIS 133	Mashup JavaScript, jQuery and AJAX (4)
CIS 134	ASP.NET with C# Business Web Programming (4)
CIS 136	Building Mobile Apps (3)

User Support: 3 units

CIS 11	Help Desk Operations (3)
CIS 30	Introduction to Electronic Commerce (3)
CIS 40	Personal Computer Operations (3)

Total Units: 21-22

For Gainful Employment program information, please visit www.elcamino.edu/academics/business/cis

CONSTRUCTION TECHNOLOGY

A.S. Degree and Certificates of Achievement

Industry and Technology Division

www.elcamino.edu/academics/indtech

By completing the degree or certificate requirements, students acquire proficiency in basic residential construction techniques and in analyzing, evaluating, and providing solutions for a variety of job site situations. Students will be able to interpret blueprints, estimate materials, lay out, and construct a basic residential structure in accordance with Uniform Building Code requirements. Competencies are assessed regularly by student performance in the construction technology laboratory. The program provides career opportunities in various aspects of construction, including carpentry, cabinetmaking, furniture making, a variety of subcrafts, and contracting. Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit applicable toward the California State Contractor's License Board experience requirement.

At least 50 percent of the major requirements for the Associate in Science degree must be completed at El Camino College.

Cabinet and Fine Woodworking Option:

Course	Title
CTEC 200	General Cabinet Making (2)
CTEC 201	Upper Residential Cabinets (2)
CTEC 202	Base Residential Cabinets (2)
CTEC 203	Dedicated Use Cabinets (2)
CTEC 210	Furniture Making Laboratory - Interpreting Commercial Plans (1.5)
CTEC 211	Furniture Making Laboratory - Plan Modifications (1.5)
CTEC 212	Furniture Making Laboratory - Developing Original Plans (1.5)
CTEC 213	Furniture Making Laboratory - Building without Plans (1.5)
CTEC 220	Hinging Systems and Doors (2.5)
CTEC 221	Drawer Systems (2.5)

Total Units: 19

Recommended Electives:

ARCH 119	Computer Aided Architectural Drawing (3)
ARCH 150A	Construction Documentation I (3)
BUS 17	Personal Finance (3)
CADD 5	Introduction to Mechanical Drafting (3)
CTEC 95	Cooperative Work Experience Education (2-4)
CTEC 100	Building Fundamentals (4)
CTEC 110	Additions and Remodeling (4)
CTEC 222	Convenience Hardware (2.5)
CTEC 230	Cabinet Making Lab (1.5)

Construction Technology Option:

Course Title

Required Core: 18 units

CTEC 100	Building Fundamentals (4)
CTEC 110	Additions and Remodeling (4)
CTEC 172	Residential Electrical Wiring (4)
CTEC 180	Residential Plumbing (4)
CTEC 200	General Cabinet Making (2)

16 units from:

ARCH 179	Design/Build Studio (4)
CTEC 121	Concrete and Formwork (4)
CTEC 122	Rough Framing (4)
CTEC 131	Roof Framing (4)
CTEC 132	Stair Framing (4)
CTEC 141	Interior Subcrafts (4)
CTEC 142	Exterior Subcrafts (4)
CTEC 150	Contract Estimating (3)
CTEC 160	Business and Legal Aspects of Contracting (3)
CTEC 201	Upper Residential Cabinets (2)
CTEC 202	Base Residential Cabinets (2)
CTEC 203	Dedicated Use Cabinets (2)

Total Units: 34

Recommended Electives:

ARCH 150A	Construction Documentation I (3)
BUS 17	Personal Finance (3)
CIS 13	Computer Information Systems (3)
CTEC 95	Cooperative Work Experience Education (2-4)

Certificates of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Cabinet and Fine Woodworking Certificate of Achievement

Course Title

Required Core: 8 units

CTEC 200	General Cabinet Making (2)
CTEC 201	Upper Residential Cabinets (2)
CTEC 202	Base Residential Cabinets (2)
CTEC 203	Dedicated Use Cabinets (2)

11 units from:

CTEC 210	Furniture Making Laboratory - Interpreting Commercial Plans (1.5)
CTEC 211	Furniture Making Laboratory - Plan Modifications (1.5)
CTEC 212	Furniture Making Laboratory - Developing Original Plans (1.5)
CTEC 213	Furniture Making Laboratory - Building without Plans (1.5)
CTEC 220	Hinging Systems and Doors (2.5)
CTEC 221	Drawer Systems (2.5)

CTEC 222 Convenience Hardware (2.5)

CTEC 230 Cabinet Making Lab (1.5)

Total Units: 19

Construction Technology Certificate of Achievement

Course Title

Required Core: 18 units

CTEC 100 Building Fundamentals (4)

CTEC 110 Additions and Remodeling (4)

CTEC 172 Residential Electrical Wiring (4)

CTEC 180 Residential Plumbing (4)

CTEC 200 General Cabinet Making (2)

16 units from:

ARCH 179 Design/Build Studio (4)

CTEC 95 Cooperative Work Experience Education (2-4)

CTEC 121 Concrete and Formwork (4)

CTEC 122 Rough Framing (4)

CTEC 131 Roof Framing (4)

CTEC 132 Stair Framing (4)

CTEC 141 Interior Subcrafts (4)

CTEC 142 Exterior Subcrafts (4)

CTEC 150 Contract Estimating (3)

CTEC 160 Business and Legal Aspects of Contracting (3)

CTEC 201 Upper Residential Cabinets (2)

CTEC 202 Base Residential Cabinets (2)

CTEC 203 Dedicated Use Cabinets (2)

Total Units: 34

New Programs

Certificates of Accomplishment

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Cabinet and Millwork Certificate of Accomplishment

Course Title

Required Core: 8 units

CTEC 200 General Cabinet Making (2)

CTEC 201 Upper Residential Cabinets (2)

CTEC 202 Base Residential Cabinets (2)

CTEC 203 Dedicated Use Cabinets (2)

2.5 units from:

CTEC 220 Hinging Systems and Doors (2.5)

CTEC 221 Drawer Systems (2.5)

Total Units: 10.5

Euro Hardware Certificate of Accomplishment

Course Title

Required Core: 5 units

CTEC 220 Hinging Systems and Doors (2.5)

CTEC 221 Drawer Systems (2.5)

2 units from:

CTEC 200 General Cabinet Making (2)

CTEC 201 Upper Residential Cabinets (2)

CTEC 202 Base Residential Cabinets (2)

CTEC 203 Dedicated Use Cabinets (2)

1.5 units from:

CTEC 210 Furniture Making Laboratory - Interpreting Commercial Plans (1.5)

CTEC 211 Furniture Making Laboratory - Plan Modifications (1.5)

CTEC 212 Furniture Making Laboratory - Developing Original Plans (1.5)

CTEC 213 Furniture Making Laboratory - Building without Plans (1.5)

Total Units: 8.5

Furniture Design and Fabrication Certificate of Accomplishment

Course Title

Required Core: 6 units

CTEC 210 Furniture Making Laboratory - Interpreting Commercial Plans (1.5)

CTEC 211 Furniture Making Laboratory - Plan Modifications (1.5)

CTEC 212 Furniture Making Laboratory - Developing Original Plans (1.5)

CTEC 213 Furniture Making Laboratory - Building without Plans (1.5)

2.5 units from:

CTEC 220 Hinging Systems and Doors (2.5)

CTEC 221 Drawer Systems (2.5)

Total Units: 8.5

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/constructiontech

ECONOMICS

AA-T Degree

Behavioral and Social Sciences Division
www.elcamino.edu/academics/behavioralsocial

The degree in economics is designed to provide students with a foundation in macroeconomics and microeconomics theory. Economics majors will acquire knowledge of the principle economic models for understanding how the national economy functions, the fundamental laws of supply and demand, and international trade theory. Students will be able to apply methodologies to assess fiscal and monetary policy, price levels, and the allocation of goods and resources in competitive and monopolistic markets. Competencies will be assessed through regularly scheduled objective and essay examinations and problem solving assignments.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in Economics or similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Program Modification

Course	Title
<i>Required Core: 14-15 units</i>	
ECON 1	Principles of Economics: Macroeconomics (3)
ECON 2	Principles of Economics: Microeconomics Theory (3)
MATH 150	Elementary Statistics for Probability (4)
MATH 160	Calculus I for the Biological, Management and Social Sciences (4)
or	
MATH 165	Calculus for Business and Social Sciences (5)
or	
MATH 190	Single Variable Calculus and Analytic Geometry I (5)
<i>List A: 3-5 units</i>	
BUS 1A	Financial Accounting (4)
BUS 1B	Managerial Accounting (4)
BUS 28	Written Business Communications (3)
CIS 13	Computer Information Systems (3)
MATH 140	Finite Mathematics for Business and Social Sciences (4)
MATH 191	Single Variable Calculus and Analytic Geometry II (5)
<i>List B: 3-5 units</i>	
<i>Any course from List A not already completed</i>	
ECON 5	Fundamentals of Economics (3)
MATH 220	Multi-Variable Calculus (5)
MATH 270	Differential Equations with Linear Algebra (5)
Total Units: 20-25	

GENERAL STUDIES

A.A. Degree

Behavioral and Social Sciences Division
www.elcamino.edu/academics/behavioralsocial

The Associate Degree in General Studies provides students with the opportunity to explore diverse methods of inquiry by selecting courses from a cross section of disciplines in an "area of emphasis." Students will develop critical thinking skills, learn to communicate effectively in writing, acquire an understanding of major concepts to solve problems, and employ methods of scientific inquiry to understand the world around them. Completion of the degree requirements will provide students with the skills and resources needed to make informed academic and career-related decisions.

Completion of the General Studies degree does not guarantee acceptance into a four-year university. Students planning to transfer to a CSU or UC should follow the CSU GE Breadth or IGETC pattern and complete transferable coursework that relates to the major at the CSU or UC campus. For further information and course selection, please consult with an academic counselor.

El Camino College Major Requirements

General Education:

Choose one of the following patterns:

1. Associate Degree General Education Requirements (minimum of 24 units and the math competency requirement).
2. CSU General Education Breadth (39 units) – This general education pattern will fulfill lower-division general education requirements at the CSU campuses.
3. Intersegmental General Education Transfer Curriculum (IGETC) (34 units) – This general education pattern will fulfill lower-division requirements at the CSU, UC and some private colleges and universities.

Area of Emphasis:

1. A minimum of 18 units are required in one Area of Emphasis listed below.
2. A minimum of one course from two different disciplines is required in the emphasis.
3. The courses selected in the emphasis may also be used to fulfill general education areas on the Associate Degree, CSU General Education Breadth, or IGETC Electives:

Elective units may be necessary to obtain the 60 degree applicable units that are required for the Associate Degree.

Program Modification

6. Area of Emphasis in Kinesiology and Wellness:

These courses emphasize lifelong understanding and the development of a student's physiological, psychological, and social well-being. Students transferring to a four-year university will have a basic foundation for further studies in areas such as physical education, recreation, nutrition, or allied health fields. This emphasis may be useful for students interested in possible career paths in athletic training, personal training, management, exercise science, sports nutrition, and education.

Select a total of 18 units from the following disciplines:

Course	Title
Physical Education: minimum 6 units	
PE 217	Sports Officiating (2)
PE 270	Fitness and Sports Nutrition (3)
PE 272	Care and Prevention of Athletic Injuries (3)
PE 275	Sport Psychology (3)
PE 277	Introduction to Kinesiology and Physical Education (3)
PE 280	Exercise and Nutrition Programs for Fitness and Weight Management (3)
PE 290	Personal Fitness Trainer (3)
Science and Nutrition: minimum 3 units	
ANAT 30	Essentials of Anatomy and Physiology (4)
ANAT 32	General Human Anatomy (4)
APHY 34A	Anatomy and Physiology I (4)
APHY 34B	Anatomy and Physiology II (4)
BIOL 10	Fundamentals of Biology (4)
or	
BIOL 10H	Honors Fundamentals of Biology (4)
BIOL 101	Principles of Biology I (5)
BIOL 102	Principles of Biology II (5)
CHEM 1A	General Chemistry I (5)
CHEM 4	Beginning Chemistry (5)
CHEM 20	Fundamentals of Chemistry (5)
CHEM 21A	Survey of General and Organic Chemistry (4)
CHEM 21B	Survey of Organic and Biochemistry (4)
MICR 33	General Microbiology (5)
NFOO 11	Nutrition (3)
PHYS 2A	General Physics (4)
PHYS 2B	General Physics (4)
PHYS 11	Descriptive Introduction to Physics (3)
PHYO 31	Human Physiology (4)
Social Sciences and Development: minimum 3 units	
CH 1	Personal and Community Health Issues (3)
HDEV 110	Strategies for Creating Success in College and in Life (3)
PSYC 5	General Psychology (3)
SOCI 101	Introduction to Sociology (3)
Elective Courses:	
FAID 1	First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care (3)
NFOO 15	Nutrition for Infants and Young Children (3)
PSYC 2	Psychology for Effective Living (3)
PSYC 12	Human Sexuality (3)
PSYC 16	Lifespan Development (3)

Total Units: 18

Physics

Natural Sciences Division

www.elcamino.edu/academics/naturalsciences

Course Modification

Physics 1D

Optics and Modern Physics

4 units; 4 hours lecture, 2 hours lab

Prerequisite: Physics 1A with a minimum grade of C;

Mathematics 191 with a minimum grade of C

Credit, degree applicable

*Transfer CSU, UC**

This is the fourth course in four-semester calculus-based physics sequence intended for students entering majors in engineering and the physical sciences. The topics covered include geometric and physical optics, special relativity, quantum mechanics, nuclear physics, and selected topics in modern physics.

Note: This course is only offered in the spring semester.

**Note: The maximum UC credit allowed for students completing Physics 1A, 1B, 1C, 1D and Physics 2A, 2B and/or Physics 3A, 3B is one series.*