Associate Degree Requirements

Shasta College awards both the Associate in Arts degree and the Associate in Science degree. The pattern of course offerings at Shasta College is designed to be as flexible as possible in meeting individual student needs. Students may enroll in courses for which they qualify without any formal diploma or degree goals. Students have the following options available: Associate in Arts degree, Associate of Science degree, or certificate of completion.

Upon completion of the following requirements a student at Shasta College will be granted an Associate Degree. Responsibility for filing an application for graduation rests with the student and all transcripts for high school and prior college work attempted must be on file for the application to be considered. Both state and local requirements for the degree are listed below. Students at Shasta College have the opportunity to prepare for transfer to a four-year institution in virtually any major offered by those colleges or universities.

I. UNIT REQUIREMENT - At least sixty (60) semester units of course work.

II. SCHOLARSHIP REQUIREMENT - An overall grade point average of not less than 2.00 (C* average) based on all college work attempted. All courses in the major must be completed with a "C" or better.

III. RESIDENCE REQUIREMENT - The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.

IV. COURSE REQUIREMENTS -
   A. Major Field of Study: Select Associate in Arts or Associate in Science degree program.
   B. General Education: 21-39 units. Select either Associate, CSU, or IGETC pattern from the following pages.

V. COMPETENCY GRADUATION REQUIREMENTS--A.A./A.S. DEGREE
   in order to receive an Associate Degree from Shasta College, the student must demonstrate competence in reading, in written expression, and in mathematics. Students must also meet the multicultural requirement and the computer literacy requirement.
   A. Competence in reading and in written expression is demonstrated by a grade of "C" or higher in one of the following courses:
      ENGL 1A College Composition      BUAD 66 Business Communications
   B. Competence in mathematics is demonstrated by one of the following criteria:
      1. A grade of "C" or higher in a mathematics course listed from 1-99 OR one of the following courses:
         MATH 102 Inter. Algebra         MATH 110 Essential Math
      2. Performance at or above the level specified below on the following examinations:
         Examination                      Score
         College Board Advanced Placement Math Test (CALC or STAT) 3
         Scholastic Aptitude Test - Mathematics (SAT-M) 520 (Beginning 4/95)
         American College Testing (ACT) – Math 23
         Intermediate Algebra Diagnostic Test 30
         COMPASS Algebra Test 54
         Accuplacer – College Level 45
   C. Multicultural Requirement
   D. Computer Literacy Competency requirement

SECOND DEGREE REQUIREMENTS - Check with Admissions and Records Office for specific criteria.

APPLYING FOR YOUR Degree - You must apply for your A.A./A.S. Degree in the Admissions & Records Office one month before the end of the semester in which you plan to complete it.

CATALOG RIGHTS - As long as you maintain continuous attendance at Shasta College, your catalog rights are protected according to the following regulations: You may elect to meet the graduation requirements in effect 1) at the time of initial enrollment or 2) at the semester of graduation, provided you have not had an interruption in attendance of more than two successive semesters. (Summer is not considered a successive semester when not enrolled but will be used to begin enrollment or maintain continuous attendance.) If you are following an earlier version of a program in which your department has discontinued or modified required courses, the department may authorize appropriate substitutions. It is advisable that you make contact with the department as soon as possible so you can accommodate any changes into your ed plan. If while enrolled you declare a new major, you should normally expect to follow the requirements in effect at the time you change your major or in effect when you file for graduation. Whether you choose option 1) or 2) concerning your major or emphasis, you may continue to follow the general education and graduation requirements listed in the catalog at the time of initial enrollment (provided you maintain catalog rights as defined above). While catalog rights hold degree requirements, they do not shield students from changes in prerequisites required in a given course. Prerequisite requirements which students must follow are those stated in course descriptions in the current catalog.

DOUBLE COUNTING Courses may be double counted for the emphasis and the GE pattern. For the General Studies major, the emphasis and GE pattern must total at least 36 units. For the University Studies major, the emphasis and GE must total at least 45 units.

The Associate in Science degree The AS degree is primarily oriented to technical, science, and occupational programs. It is intended for the student who plans to enter the workforce after completion of the two-year degree or for transfer majors in math, engineering, or sciences.

Shasta College awards the Associate in Science degree for the occupational majors listed below. While these programs may include transferable courses, they are designed to provide the necessary skills that prepare students to enter the workforce. Students planning to transfer should complete one of the Associate in Arts degrees listed below or meet with a counselor to determine the additional courses necessary for transfer.

Administration of Justice
Agriculture Business*  Agriculture-Horticulture
Agriculture-Sustainable Agriculture Science*  Agriculture-Natural Resources
Agriculture-Equine Science  Agriculture-Veterinary Technician
Agriculture-Forest Science and Technology  Automotive Technology

* Pending Chancellor's Office Approval  (A.S. Degrees continued on next page)
A.S. Degrees continued:

- Business Administration
- Accounting Concentration
- General Business Concentration
- Management Concentration
- Computer Aided Drafting (CAD) Technology
- Computer and Information Systems
  - Business Information Systems Concentration
  - Computer Networking Concentration (CCNA Option)
  - Computer Networking Concentration (CCNP Option)
- Construction Technology
- Dental Hygiene
- Diesel Technology
- Early Childhood Education
- Engineering Technology
- Family Studies
- Fire Technology
- General Studies
- Hospitality Management
- Culinary Arts Concentration
- Hotel/Restaurant Management Concentration
- Legal Assistant
- Nursing – Associate Degree Nursing
- Office Administration
- Administrative Office Professional
- Health Information Management
- Welding Technology

The Associate in Arts degree: The AA degree is a liberal arts degree. It is designed for the student who wishes to complete lower division requirements in preparation for transfer to a four-year public or private university.

Shasta College offers several AA degrees that prepare students to transfer:

1. **AA – University Studies**: A total of 60 units are required including completion of a transfer GE pattern: IGETC, CSU GE, or 30 unit pattern. Refer to A.A. University Studies Area of Emphases in the catalog for complete requirements.

2. **Additional Transfer AA Majors**: (Students complete the major and the 33-39 unit CSU or IGETC general education plan)
   - Art
   - Communication Studies
   - Agric. - Environmental Horticulture
   - Journalism
   - Music
   - Theatre Arts

Note: Students also transfer in many other majors by completing the IGETC or CSU GE certificate and the major preparation courses listed at www.assist.org

**COURSE NUMBERING SYSTEM FOR SHASTA COLLEGE**

Shasta College has numbered courses to assist students in scheduling. Refer to the complete course description in the catalog for explanation of the course. Numbering is according to the following system:

- **0-99**: Baccalaureate level course. Courses certified by Shasta College as meeting transfer requirements to the California State University System. The U.C. system publishes a list annually that indicates which Shasta College courses are accepted for admission. This list is available in the Transfer Center, Shasta College Admissions Office, and www.assist.org.

- **100-199**: Courses, primarily vocational in nature, meeting Associate Degree graduation requirements. Generally not transferable to four-year institutions.

- **200-299**: Basic skills courses designed to enable students to succeed in college level work, or pre-collegiate occupational preparation courses. These courses do not transfer or apply to an Associate Degree (Title 5, Section 55002).

- **300-399**: Ungraded (adult education) courses designed to meet specific student needs. These courses carry no unit credit.

*Baccalaureate level courses are those commonly taught in a four-year college or university at the freshman & sophomore level.

**Certificates**

- Accounting Clerk/Bookkeeper
- Agriculture-Equine Science
- Ag-Equipment Operations and Maintenance
- Agriculture-Horticulture
- Master Floral Design
- Irrigation
- Landscape and Turf Management
- Retail Nursery Sales
- Agriculture-Natural Resources
- Automotive Machine
- Automotive Technology
- Automotive Chassis
- Automotive Electrical-Electronics
- Automotive Engine Performance
- Automotive Engine Repair
- Automotive Heating-Air Conditioning
- Automotive Powertrain
- Business Administration- Entrepreneurship
- Computer Aided Drafting (CAD) Technology
- Computer & Information Systems
- Cisco Networking
- Computer Networking (CCNA)
- Computer Networking (CCNP)
- Web Design
- Computer Maintenance
- Construction Technology
- CSU - General Education
- Customer Service Academy
- Diesel Technology
- Dietary Service Supervisor
- Early Childhood Education
- ECE-Family Childcare
- Engineering Technology
- Firefighter I Cert Program
- Firefighter II Cert Program
- Fire Tech-Wildland Firefighter 1 Academy
- Geographic Information Systems
- Hospitality
- Baking – Culinary Arts Emphasis
- Bartender – Culinary Arts Emphasis
- Dining Room Management – Culinary Arts Emphasis
- Dining Room Staff – Culinary Arts Emphasis
- Enology and Viticulture Practices
- European and California Wines
- Line Cook – Culinary Arts Emphasis
- Winemaking and Marketing
- Hospitality Management
- Culinary Arts Concentration
- Hotel/Restaurant Management Concentration
- Transition Certificate for Students with Intellectual Disabilities
- Virtual Assistant
- Watershed Restoration
- Water/Wastewater Treatment
- Welding

3/30/10
## Chapter 5 – Degrees, Programs, and Certificates

### 2010-2011

#### Associate Degree – General Education

**General Education - 21 units (plus a major field of study = 60 units)**

General education courses are designed to broaden the knowledge of students, increase their ability to reason clearly and critically, build speaking and writing and quantitative skills, and expose them to different modes of thinking about themselves and the community. These courses are designed to increase an understanding of the natural world, build knowledge of the social world, and foster an appreciation of arts and culture. Just as the main purpose of course work aimed at developing employment skills is to prepare students to work productively, then the main purpose of general education is to prepare them to be better informed, more skilled citizens--productive not only in the workplace, but also in the community and within the family. The goal is a more well-rounded, responsible individual: healthy in mind and body, tolerant of divergent points of view, able to think rationally and openly, and competent to adapt to a changing world.

In order to complete the General Education requirements, a student must complete twenty-one (21) units of study. Three units must be completed in each of the following areas: 1, Natural Science; 2, Social and Behavioral Sciences; 3, Humanities; 4-a, Language and Rationality, English Composition; 4-b, Oral Communication; 4-c, Analytical Thinking, and 5, Multicultural/Living Skills. A course cannot be counted in more than one area of study with the exception of the #6 Multicultural requirement. A four (4) quarter unit course is 2-2/3 semester units and satisfies an area. Total units must equal 21 or more semester units.

1. **NATURAL SCIENCE**—Those which examine the physical universe, its life forms and its natural phenomena.  **Three (3) units required**

<table>
<thead>
<tr>
<th>AGAS 10 Prin of Animal Sci.</th>
<th>BIOL 1 Prin of Biol</th>
<th>CHEM 6 Chem Environ</th>
<th>ESCI 14 Meteorology</th>
<th>PHYS 101 Tech Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGHEH 33 Env Hort</td>
<td>BIOL 5 Human Biol</td>
<td>CHEM 10 Chem Lib Art</td>
<td>ESCI 15 Oceanography</td>
<td>PHY 1 Physiology</td>
</tr>
<tr>
<td>AGNR 1 Intro to Nat Res</td>
<td>BIOL 10 Gen Biol</td>
<td>CHEM 16 Chem Prob Solv</td>
<td>ESCI 17 Earth Sys Sci</td>
<td>ZOOL 1 Zoology</td>
</tr>
<tr>
<td>AGNR 60 Envir Science</td>
<td>BIOL 11 Div of Life</td>
<td>ESCI 1 Phys Geology</td>
<td>ESCI 18 Global Climate</td>
<td></td>
</tr>
<tr>
<td>AGNR 64 Watershed Mgmt</td>
<td>BIOL 12 Field Biology</td>
<td>ESCI 5 Intro Geology</td>
<td>FSS 25 Nutrition</td>
<td>Or select 3 units from</td>
</tr>
<tr>
<td>AGNR 67 Energy &amp; Envir</td>
<td>BIOL 14 Heredity</td>
<td>ESCI 6 Ancient Life</td>
<td>GEOG 1A Phys Geog</td>
<td>these 1-2 unit courses:</td>
</tr>
<tr>
<td>AGPS 20 Plant Sci</td>
<td>BIOL 15 Entomology</td>
<td>ESCI 7 Int ToGeol of CA</td>
<td>MICR 1 Microbiology</td>
<td>ASTR 5,6</td>
</tr>
<tr>
<td>AGPS 24 Soils</td>
<td>BIOL 60 Biol of Aging</td>
<td>ESCI 8 Planetary Geol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANAT 1 Anatomy</td>
<td>BOT 1 Botany</td>
<td>ESCI 9 Earthquakes</td>
<td>NHIS 15 Natural History</td>
<td>BOT 50, 52</td>
</tr>
<tr>
<td>ANTH 1 Phys Anthro</td>
<td>CHEM 1A/1B Gen Chem</td>
<td>ESCI 10 Envir Geology</td>
<td>PHYS 2AB Gen Physic</td>
<td>37, 38, 42, 43, 44, 45, 46</td>
</tr>
<tr>
<td>ASTR 1 Astronomy</td>
<td>CHEM 2AB Intro Chem</td>
<td>ESCI 12 Gen Earth Sci</td>
<td>PHYS 4A Physics-Mech</td>
<td>ZOOL 15, 63</td>
</tr>
</tbody>
</table>

2. **SOCIAL AND BEHAVIORAL SCIENCES**—Those which focus on people as members of society.  **Three (3) units required**

<table>
<thead>
<tr>
<th>ADJU 10 Intro to AOJ</th>
<th>ECE 2 Child Fam Comm</th>
<th>GEOG 8 Wld Reg Geog*</th>
<th>HIST 57 Russian History</th>
<th>PSYC 16 Health Psych</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGAB 54 Ag Economics</td>
<td>ECE 9 Child Growth &amp; Dev.</td>
<td>HIST 1AB Western Civil</td>
<td>POLS 1 Intro Pol Sci</td>
<td>PSYC 20 Cross Cult Psych*</td>
</tr>
<tr>
<td>AGPS 25 Calif. Water</td>
<td>ECON 1/2A Economics</td>
<td>HIST 2/3 World Civilization*</td>
<td>POLS 2 Amer Govt</td>
<td>PSYC 41 Cult Soc Child*</td>
</tr>
<tr>
<td>ANTH 2 Cultural Anth*</td>
<td>ECON 2 Econ Issues</td>
<td>HIST 17AB US History</td>
<td>POLS 12 CA St/ Loc Govt</td>
<td>PSYC 46 Hum Mem/Lng.</td>
</tr>
<tr>
<td>ANTH 5 Human./Cult./Ecol</td>
<td>ECON 17 Econ History</td>
<td>HIST 17AB US History</td>
<td>POLS 20 Pol 3rd World*</td>
<td>SOC 1 Intro Sociology</td>
</tr>
<tr>
<td>ANTH 25 Cult. Hist Indian*</td>
<td>FSS 18 Adulthood/Aging</td>
<td>HIST 35 Hist Mex Amer*</td>
<td>POLS 25 Global Politics</td>
<td>SOC 5 Human Sexuality</td>
</tr>
<tr>
<td>ARCH 3 Prin of Arch</td>
<td>FSS 60 Life Management</td>
<td>HIST 36 History Far East*</td>
<td>POLS 5 Human Sexuality</td>
<td>SOC 15 Soc Mass Media</td>
</tr>
<tr>
<td>ARCH 44A Field Arch.</td>
<td>GEOG 1A Physical Geog</td>
<td>HIST 38 Hist World Relig*</td>
<td>PSYC 5 Human Sexuality</td>
<td>SOC 22 Soc of Aging</td>
</tr>
<tr>
<td>CMST 20 Intercl. Comm.</td>
<td>GEOG 1B Cultural Geog</td>
<td>HIST 40 Hist Gov of CA</td>
<td>PSYC 14 Und Hum Beh</td>
<td>SOC 25 Soc Minorities*</td>
</tr>
<tr>
<td>ECE 1 Human Develop</td>
<td>GEOG 7 Calif Geography*</td>
<td>HIST 55 Hist Amer Front</td>
<td>PSYC 15 Soc Psychology</td>
<td>SOC 30 Soc. Of Gender*</td>
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<td>SOC 70 Social Welfare</td>
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</tbody>
</table>

3. **HUMANITIES**—Courses in the humanities are those which study the cultural activities and artistic expressions of human beings. To satisfy the general education requirement in the humanities, a course shall be designed to help the student develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them in artistic and cultural creation and help the student develop aesthetic understanding and an ability to make value judgments. Such courses could include introductory or integrative courses in the arts, foreign languages, literature, philosophy, and religion.  **Three (3) units required**

<table>
<thead>
<tr>
<th>ART 1 Intro to Art</th>
<th>ENGL 13A/B Surv Eng Lit</th>
<th>ENGL 31 Creative Writ</th>
<th>MUS 10 Music Apprec</th>
<th>SL 96 Sign Language IV*</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2/3 Hist of Art</td>
<td>ENGL 14 Drama as Lit</td>
<td>ENGL 33 Fiction and Film</td>
<td>MUS 11 Hist Jazz &amp; Rock</td>
<td>SPAN 1/2/3 Spanish*</td>
</tr>
<tr>
<td>ART 4 World Art*</td>
<td>ENGL 15 Lit Women</td>
<td>ENGL 36 Children’s Lit</td>
<td>MUS 14 World Music*</td>
<td>SPAN 19 Span Conv/Cult</td>
</tr>
<tr>
<td>ART 6 Hist/Modern Art</td>
<td>ENGL 16 Poetry</td>
<td>FREN 1/2/3 French*</td>
<td>PHIL 6 Intro to Philosophy</td>
<td>SPAN 20 Span Conv</td>
</tr>
<tr>
<td>CHIN 1 Mandarin Chinese*</td>
<td>ENGL 17 Shakespeare</td>
<td>GERM 2/3/4 German*</td>
<td>PHIL 7 Ethics/Right/Wrong</td>
<td>TRTH 1 Intro to Theatre</td>
</tr>
<tr>
<td>CMST 30 Oral Interpret</td>
<td>ENGL 18 Afric Amer Lit*</td>
<td>HUM 2 Explor Human</td>
<td>PHIL 8 Logic</td>
<td>TRTH 5/20 Cent Theatre</td>
</tr>
<tr>
<td>CMST 35 Oral Interpret</td>
<td>ENGL 19 Bible as Lit</td>
<td>HUM 4 Human thru Film</td>
<td>PHIL 10 Life/Death Moral</td>
<td>TRTH 8 Theatre App I</td>
</tr>
<tr>
<td>ENGL 10B World Lit*</td>
<td>ENGL 20 World Mythology*</td>
<td>HUM 70 Explor Cont TV</td>
<td>RUSS/12/34 Russian*</td>
<td>TRTH 9 Theatre App II</td>
</tr>
<tr>
<td>ENGL 11A/B Surv/Am. Lit</td>
<td>ENGL 24 Multicut Pers*</td>
<td>JAPN 1/2/4 Japanese*</td>
<td>SL 90 &amp; 92 Sign Lang*</td>
<td></td>
</tr>
<tr>
<td>ENGL 12 Short Fiction</td>
<td>ENGL 25 Linguistics</td>
<td>JAPN 19/20 Japanese Conv</td>
<td>SL 94 Sign Language III*</td>
<td></td>
</tr>
</tbody>
</table>

4. **LANGUAGE AND RATIONALITY**—Courses in language and rationality are those which develop for the student the principles and applications of language toward logical thought, clear and precise expression and critical evaluation of communication in whatever symbol system the student uses.

   a. **English Composition**—Courses fulfilling the written composition requirement shall be designed to include both expository and argumentative writing.  **Three (3) units required**

| ENGL 1A College Composition | BUAD 68 Business Communication |

   b. **Oral Communication**—Instruction approved for fulfillment of the oral communication requirement emphasizes the content of communication as well as the form. Emphasis is placed on the psychological, cultural and linguistic factors which affect human communication, including how communication operates in various situations. Course content includes an emphasis on the ability to speak and listen effectively, as well as verbal and non-verbal communication.  **Three (3) units required**

<table>
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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>CMST 20 Intercl Comm.*</td>
<td>CMST 40 Argument/Debate</td>
<td>CMST 60 Public Speaking</td>
</tr>
</tbody>
</table>
To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:

- Document completion of a computer literacy requirement at another college.
- Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
- Possess IC³ certification.

**7. COMPUTER LITERACY REQUIREMENT**

To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:

- Complete one of the coursework options listed below with a grade of "C" or better:
  - CIS 1 – Computer Literacy; or
  - AGNR 52 – Computers in Agriculture and Natural Resources; or
  - CIS 10 (Excel), CIS 20 (Access), OAS 80 (Outlook), or OAS 94 (Powerpoint). Note: MOS or MCAS certification will substitute for the equivalent software class.

- Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
- Possess IC³ certification.
- Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
- Document completion of a computer literacy requirement at another college.
Areas of Emphases

General Studies – AGRICULTURE TRADES (0101.00) - 18 units
The Agriculture emphasis allows students to explore all areas of agriculture, including animal science, agriculture business, horticulture, horse practices, sustainable or holistic agriculture, equipment management, natural resources, veterinary practices, and viticulture.

Select 18 units from at least three of the following areas:
- AG 1, 6, 9, 58
- AGAS 10, 11, 15, 17, 19, 30
- AGAB 51, 52, 54
- AGHE 22, 23, 26, 27, 28, 29, 31, 31.1, 31.2, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 60, 70, 71, 72, 75, 122, 125, 130, 137, 150
- AGEQ 12, 13, 14, 101, 109, 110, 111, 112, 113, 114, 115
- AGMA 42, 44
- AGNR 1, 4, 6, 10, 11, 12, 50, 51, 52, 53, 55, 60, 61, 64, 65, 66, 67, 69, 70, 83, 173, 174, 176
- AGPS 20, 24, 25, 126
- AGSA 50, 56
- AGVET 1, 2, 3, 4, 5, 6, 7, 16
- AGVIT 80, 81

General Studies – BUSINESS - Basic Business (0501.00) - 18 units
The Basic Business emphasis allows students to explore many areas of business, including accounting, business law, management, marketing, real estate, and specialized areas such as hospitality, and casino management.

Choose 3 units from the following:
- ACCT 2, 101, 194

Choose 9 units from the following:
- BUAD 6, 8, 10, 12, 15, 40, 41, 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 66, 71, 72, 73, 80, 91, 92, 106, 120

Choose 6 units from the following:
- BUAD 76, 77, 176
- CAS 10, 40
- CIS 1
- DSS 10, 63
- HOSP 10, 20, 35, 40, 45, 50, 60, 65
- MKTG 72, 76
- REAL 30, 31, 32, 34, 136
- ECON 1A, 1B, 2

General Studies – BUSINESS – Office and Computer Technologies (0514.00) - 18 units
The office and computer technologies emphasis allows students to explore many areas of office management, including clerical skills, legal assisting, medical coding and billing, medical transcription, Computer Networking, A+, and Web design.

Select 12 – 18 units from the following areas:
- CIS 1, 2, 3, 4, 6, 10, 11, 12, 20, 21, 22, 23, 31, 32, 33, 34, 35, 36, 37, 38, 39, 50-56, 57, 60, 61, 62, 63, 64, 70, 71, 72, 73, 74, 75, 79, 80, 81, 83, 86, 90, 92
- OAS 30, 31, 51, 52, 53, 58, 63, 64, 60, 84, 91, 92, 93, 94, 96, 112, 113, 114, 150, 152, 154, 157, 158, 159, 160, 166, 171
- OAS 20, 24, 25, 126

Select 0 – 6 additional units:
- ACCT 101, 102, 103, 104
- BUAD 10, 45, 86, 71, 72, 73
- LEGL 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 53, 55, 56, 58

General Studies – ESCI - Climatological and Meteorological Studies (4902.00) – 18 units
Many natural processes studied across a broad spectrum of scientific disciplines influence climate and weather on Earth. This degree plan reflects that fact by incorporating multidisciplinary courses such as Earth System Science and Oceanography while being centered on a core of physics, meteorology, and global climate. Electives in the plan can support spatial associations, environmental considerations, geologic and astronomical influences, as well as computer basics and statistics, depending on student interests. At least one chemistry and one physics course are recommended for the degree, as well as the completion of MATH 102 for the GE pattern.

Complete the following Earth Science courses:
- ESCI 14 Meteorology
- ESCI 17 Earth System Sciences
- ESCI 18 Global climate: Past, Present and Future

Select one of the following science courses to total 4 units:
- AGNR 60 and 61
- ESCI 10, 15
- PHYS 2B

Select any of the following courses to total 4 units:
- ASTR 1
- CIS 1
- GIS 1, 10, 22
- MATH 14
- AGNR 1, 83

General Studies – ESCI - Coastal Oceanographic Studies (4902.00) – 20 units
This degree is designed to focus the student's studies on coastal marine environments. The plan includes core and supporting classes that provide the background necessary to apply basic scientific principles in support of field- and lab-based coastal research including data collection and analysis, various scientific methodologies in the field and in the lab, relevant modern scientific theory, and scientific problem solving. At least one chemistry and one physics course are recommended for the degree, as well as the completion of MATH 102 for the GE pattern.

Complete the following Earth Science courses:
- ESCI 1 Physical Geology
- ESCI 15 Oceanography
- ESCI 16 Coastal Oceanographic Field Studies

Select one course from each of the following science course listings to total 7 units:
- Choose one 3-unit course:
  - BIOL 12
  - ESCI 10, 17
- Choose one 4- unit course:
  - AGNR 60 and 61
  - BIOL 1 (recommended), 10
  - PHYS 2B

Select any of the following courses to total 3 units:
- AGNR 1, 83
- CIS 1
- GIS 1, 10, 22
- MATH 14
- NHIS 15
General Studies – ESCI - Geologic Field Studies (4902.00) – 20 units

This degree plan places a field emphasis around classes that provide the background necessary to apply basic scientific principles centered on the geological sciences. Classes support modern geologic theory and its application to field problems as well as lab experiences that produce a foundation for successful fieldwork. At least one chemistry and one physics course are recommended for the degree, as well as the completion of MATH 102 for the GE pattern.

Complete the following Earth Science courses:
ESCI 1  Physical Geology
ESCI 23  Introduction to Geology in the Field

And one geology course with a historical component:
ESCI 2, 6, 7, or 10

Select one of the following Earth Science courses:
ESCI 9  Geologic Hazards
ESCI 11  Economic Geology

Select one combination of the following Earth Science field courses to total 4 units:
(Field courses include ESCI 26,27,32,33,34,35,36,37,38,42,43,44,45, and 46)

Any two 30-series in ESCI courses and any one 40 series ESCI course OR
ESCI 26 or 27 and any two 40 -series ESCI courses

Select any of the following courses to total 3 units:
AGNR 1, 83
CIS 1
GIS 1, 10, 22
MATH 14
NHIS 15

General Studies – FIRE – Emergency Medical Response (2133.00) – 18 Units

This degree is directed at students who will be working as Emergency Medical Technicians. Additionally, this degree could be used as a general preparation program for those students who will be attending a Paramedic certification program.

Complete the following:
FAID 175

And select 13 units from the list below:
BIOL 5
FAID 132, 133, 134
FIRS 120
FSS 25
MICR 1

General Studies – FIRE – Fire Investigation (2133.00) – 18 Units

While available to anyone, this degree is designed for students who intend on working as fire investigators. Additionally, this degree is applicable for students who are, or will be working in Fire Prevention, Plans Checking, or similar functions within a municipal fire department. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in Chemistry, Physics, Engineering, Systems Analysis, or similar disciplines.

Select 18 units from the list below:
ADJU 16, 20
FIRS 71, 86, 189, 191, 192
FTWL 101
FTWP 114

General Studies – FIRE – Fire Service Command, Company Officer (2133.00) – 18 Units

While available to anyone, this degree is designed for students who have been working as Firefighter/Engineers (paid or volunteer) and intend on becoming Engine Captains. Additionally, this degree supports wildland firefighters who are, or will be working at the Crew/Engine/Dozer/Squad Boss, or similar supervisory positions. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in team development, group dynamics/psychology, fire administration or similar disciplines.

Complete the following:
FIRS 85, FIRS 87, and FTWO 114

And select 12.5 units from the list below:
FIRS 100,108,123,124,135,136,179
FTWO 116, 121,135
FTWL 103

General Studies – FIRE – Fire Service Leadership (2133.00) – 18 Units

While available to anyone, this degree is designed for students who have been working as Firefighter/Engineers (paid or volunteer) and intend on promoting to supervisory positions. Additionally, this degree supports wildland firefighters who are or will be working at the Crew/Engine/Dozer Boss, Squad Boss, or similar supervisory positions. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in management, leadership, organizational dynamics, industrial psychology, cognitive engineering or similar disciplines.

Complete the following:
FIRS 180
FTWO 134

And select 13 units from the list below:
ADJU 42
CMST 55
CMST maximum of 3 units
FIRS 113
FTWO 115
LEGL 56
PSYC maximum of 3 units
PHIL 14

NOTE: Student may use a maximum of 3 units from the BUAD courses that are listed below:
BUAD 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

General Studies – FIRE – Rescue Technologies (2133.00) – 18 Units

While available to anyone, this degree is designed for students who have been working as Firefighters (paid or volunteer) and intend on transferring or upgrading to a Technical Rescue or Urban Search and Rescue Team. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with the final target being undergraduate and graduate degrees in Materials Science, Engineering, Health and Safety, Physics, or similar disciplines.

Complete the following:
FIRS 148
FTWO 113
FIRS 55

And select 16.5 units from the list below:
FAID 132, 133, 134
FIRS 120
FSS 25
MICR 1

Courses that will also be accepted from other accredited colleges:
Rescue Systems 2
Confined Space Rescue Operations
Trench Rescue
Low Angle Rescue Operational

General Studies – FIRE – Wildland Fire Behavior (2133.00) – 18 Units

While available to anyone, this degree is designed for students who have been working as wildland firefighters and intend on working within the Plans Section of the Incident Command System (specifically the Situation Unit and Fire Behavior positions). Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in Meteorology, Physics, or similar disciplines.

Complete the following:
ESCI 14
FTWO 113, 132, 144

Select 10.5 units from the list below:
CHEM maximum of 3 units
FTWL 101, 103
FTWO 152, 157, 162
FTWP 110, 123, 126
MATH 102, Squad Boss, or similar supervisory positions. Once a student has completed this degree, it is hoped that they will continue their education and pursu
### General Studies – FIRE – Wildland Fire Reconnaissance (2133.00) – 18 units

While available to anyone, this degree is designed for students who have been working as wildland firefighters and intend on working within the Plans Section of the Incident Command System (specifically the Situation Unit and Field Observer positions). Additionally, this degree is applicable to students who are working within the Incident Command System as Division Supervisors, Strike Team Leaders, Line Scouts, Lookouts or Squad Bosses. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in Geographical Information Systems, Geography, Cartography, or similar disciplines.

Select 18 units from the list below:

- BOT
- ESCI
- FIRS
- FTWL
- FTWO
- GEOG
- GIS

### General Studies – FOOD AND BEVERAGE AND LODGING MANAGEMENT (1307.00) – 18 units

The Food and Beverage and Lodging management emphasis allows students to explore many areas of the hospitality industry, including culinary arts, restaurant management, casino management, and beverage management.

Select 12-18 units from the following courses:

- CULA
- BUAD
- CAS
- ACCT
- CIS

### General Studies – HEALTH (0837.00) – 18 units

The Health emphasis allows students to explore health-related topics such as nutrition, physical fitness, substance abuse, wellness, and medical-related areas in medical terminology, first aid, EMT training. Students who have completed LVN and CNA certificate programs can use this emphasis to complete an associate degree.

Select 18 units from at least two areas:

- FAID
- FSS
- HLTH
- HEOC
- PE
- PEAT
- VOCN
- DAN
- PE
- PEAT

*Limit of 6 units from Dance, Physical Education activity, and Athletics courses combined.

### General Studies – HUMAN DEVELOPMENT (1301.00) – 18 units

The Human Development emphasis permits students to explore the areas of early childhood education, teacher preparation, and family studies in order to develop foundational concepts and skills in working with people of all ages. Students will recognize that each human life, characterized by multiple influences and interrelated domains, is worthy of study, both individually and within a variety of contexts.

Select 18 units from at least two of the following areas:

- ECE
- EDUC
- EDTE
- FSS

### General Studies – HUMANITIES (4903.00) – 18 units

The Humanities emphasis permits students to explore the arts, ideas, values, and cultural expressions of the world’s peoples as a foundation for lifelong learning or as an introduction to fine arts, literature, music, theater, communication, journalism, and world languages.

Select 18 units from at least three of the following areas (with no more than 9 units of foreign language):

- ART
- CMST
- ENGL
- FREN
- GER
- HUM
- JAPN
- JOUR
- MUS
- PHIL
- RUSS
- SPAN
- THTR

### General Studies – INDUSTRIAL TECHNOLOGIES (0999.00) – 18 units

The Industrial Technology emphasis permits the student to explore the trades and acquire skills in a variety of technical fields: automotive and diesel technology, construction, computerized drafting, computer electronics, heavy equipment operation, aviation ground school, machine tooling, and welding.

Select 18 units from at least three of the following areas:

- ALMA
- AUTO
- AVIA
- CONS
- DIES
- ELEC
- ENGR
- INDE
- WELD

### General Studies – LANGUAGE ARTS (1502.00) – 18 units

The emphasis in language arts allows students to explore the areas of both written and spoken language, literature, and world languages.

Select 18 units from at least two areas:

- CMST
- ENGL
- FREN
- GER
- JAPN
- RUSS
- SPAN
- JOUR
General Studies – NATURAL SCIENCES (4902.00) – 18 units

This emphasis allows the student to explore the broad areas of life and physical sciences as a foundation for lifelong learning.

Select 18 units from at least four of the following areas:

- Agriculture
  - AGAS 19
  - AGEH 33
  - AGNR 60, 67
  - AGPS 20

- ASTR 1, 5, 6
- BIOL 1, 5, 6, 10, 11, 12, 14, 15, 30
- BOT 1, 5, 32
- CHEM 1A, 1B, 2A, 2B, 6, 10, 11, 16, 26, 70, 70A, 71, 71A
- ESCI 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 23, 26, 27, 32, 33, 34, 35, 36, 37, 38, 42, 43, 44, 45, 46
- FSS 25
- GEOG 1A
- GIS 1, 10, 20, 21, 22, 23, 24, 25
- MICR 1
- NHIS 15, 65, 105
- PHSC 1
- PHY 1, 1L
- PHYS 2A, 2B, 4A, 4B, 4C, 101
- ZOOL 1, 15, 63

General Studies – PUBLIC SAFETY AND SERVICES (2105.00) – 18 units

This emphasis permits the student to explore courses in the field of public safety and for current law enforcement personnel to earn an associate degree for advancement in the field.

Complete the following course:

- ADJU 10 Introduction to Administration of Justice OR ADJU 131 Regular Basic Course Modular Format Level III Academy

Select the remaining 13 - 15 units from the following:

- ADJU 10, 11, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 30, 40, 41, 42, 100, 102, 103, 106, 131, 132

General Studies – SOCIAL SCIENCES (4903.00) – 18 units

This emphasis allows students to explore the social and behavioral sciences as a foundation for lifelong learning, or as introduction to the related fields of anthropology, psychology, sociology, economics, geography, history, and political science.

Select 18 units from at least three of the following areas:

- ANTH 1, 2, 3, 4, 5, 14, 25
- ARCH 1, 2, 3, 4, 5
- ECE 1, 2, 3
- ECON 1A, 1B, 2, 17
- FSS 1, 2, 3, 4, 5, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 30, 40, 41, 42, 100, 102, 103, 106, 131, 132
- GEOG 1A, 1B, 2A, 2B, 7, 8, 10, 11
- HIST 1A, 1B, 2, 3, 17A, 17B, 25, 35, 36, 38, 40, 55, 57
- POLS 1, 2, 12, 20, 25
- PSYC 1A, 2, 3, 5, 14, 15, 16, 17, 18, 20, 41, 46
- SOC 1, 2, 15, 22, 25, 70
Students shall select a minimum of nine (9) units in the physical universe and its life forms and in mathematical concepts and quantitative reasoning. Students shall select at least three units from each area. One of the courses must have a laboratory. Additional courses may be selected from any area. Courses underlined are designated as laboratory courses.

**B1/B3: Physical Sciences**
- ASTR 1: Astronomy
- AGNR 67: Energy & the Environment
- AGPS 24: Soils
- CHEM 1A: General Chemistry
- CHEM 1B: General Chemistry
- CHEM 12A: Introduction to Chemistry
- CHEM 2B: Intro to Organic & Bio Chemistry
- CHEM 10: Chemistry for Liberal Arts
- CHEM 11: Chemistry Lab for Liberal Arts
- CHEM 16: Chemical Problem Solving

**B2/B3: Life Sciences**
- AGAS 19: Principles of Animal Science
- AGHE 33: Environ. Horticulture
- AGNR 60: Environmental Science
- AGNR 61: Environmental Science Lab
- AGPS 20: Plant Science
- ANAT 1: Human Anatomy
- ANTH 1: Physical Anthropology
- BIOL 10: General Biology
- BIOL 11: Diversity of Life
- BIOL 12: Field Biology
- BIOL 14: Heredity

**B4: Mathematical Concepts and Quantitative Reasoning**
- MATH 2: Pre-Calculus Mathematics
- MATH 3A, 3B, 4A: Calculus
- MATH 4B: Differential Equations
- MATH 6: Linear Algebra

**C1: Arts**
- ART 1: Introduction to Art
- ART 2,3: History of Western Art
- **ART 4: World Art**
- ART 6: History of Modern Art
- CMST 30: Oral Interpretation

**C2: Humanities**
- CHIN 1: Mandarin Chinese
- **ENGL 10A: World Literature to 1500**
- **ENGL 10B: World Literature after 1500**
- ENGL 11A, 11B: Survey of American Lit.
- ENGL 12: Intro to Short Fiction
- ENGL 13A, 13B: Survey of English Lit.
- ENGL 14: Drama as Lit
- ENGL 15: Intro. to Lit. By/About Women
- ENGL 16: Poetry
- **ENGL 18: African American Lit**
- ENGL 19: Survey of Bible as Literature
- **ENGL 20: World Mythology**

**C2: Humanities**
- CHIN 1: Mandarin Chinese
- **ENGL 10A: World Literature to 1500**
- **ENGL 10B: World Literature after 1500**
- ENGL 11A, 11B: Survey of American Lit.
- ENGL 12: Intro to Short Fiction
- ENGL 13A, 13B: Survey of English Lit.
- ENGL 14: Drama as Lit
- ENGL 15: Intro. to Lit. By/About Women
- ENGL 16: Poetry
- **ENGL 18: African American Lit**
- ENGL 19: Survey of Bible as Literature
- **ENGL 20: World Mythology**
Shasta College 2010-11 California State Universities – General Education (continued)

**CATEGORY D:** Students shall select a minimum of nine (9) units in social, political and economic institutions and behavior, and their historical background, with courses taken in at least two disciplines.

### D1: Anthropology and Archaeology
- **ANTH 2:** Cultural Anthropology
- **ARCH 3:** Principles of Archaeology
- **ANTH 5:** Humanity, Culture & Ecology
- **ANTH 14:** Religion, Myth, and Ritual
- **ANTH 25:** Culture & History/No. Am. Indian
- **ARCH 3:** Principles of Archaeology
- **ANTH 14:** Religion, Myth, and Ritual

### D2: Economics
- AGAB 54: Agricultural Economics
- ECON 1A, 1B: Principles of Economics
- ECON 2: Economic Issues & Policies

### D3: Ethnic Studies
- **ANTH 25:** Culture & Hist/North Am. Indian
- **GEOG 7:** California Geography
- **HIST 25:** African American History

### D4: Gender Studies
- SOC 30: Sociology of Gender

### D5: Geography
- **GEOG 1A:** Physical Geography
- **GEOG 1B:** Cultural Geography
- **GEOG 7:** California Geography
- **GEOG 8:** World Regional Geography

### D6: History
- **HIST 1A, 1B:** History of Western Civ.
- **HIST 2:** World Civ to 1500 C.E.
- **HIST 3:** World Civ 1500 to Present
- **HIST 17A, 17B:** U.S. History
- **HIST 25:** African American History
- **HIST 35:** History of Mexican Americans
- **HIST 36:** History of the Far East
- **HIST 38:** History of World Religion
- **HIST 40:** History & Govern. California
- **HIST 55:** History of American Frontier
- **HIST 57:** Russian History

### D7: Interdisciplinary Social or Behavioral Science
- **AGNR 11:** Environmental Ethics
- **AGPS 25:** California Water
- **CMST 20:** Intercultural Communication
- **ECE 1:** Human Development
- **ECE 9:** Child Growth & Development
- **ECE 17:** Economic History of the US
- **JOUR 21:** Intro. to Mass Communications
- **PSYC 1A:** General Psychology
- **PSYC 5:** Human Sexuality
- **PSYC 14:** Understanding Human Behavior
- **PSYC 16:** Health Psychology
- **SOC 2:** Social Problems
- **SOC 22:** Sociology of Aging
- **SOC 30:** Sociology of Gender
- **SOC 70:** Social Welfare

### D8: Political Science, Government, and Legal Institutions
- **ADJU 10:** Intro to AOJ
- **ADJU 12:** Political Science
- **POLS 2:** Intro. to Amer. Government
- **POLS 12:** CA State and Local Government
- **POLS 20:** Politics of 3rd World Nations
- **POLS 25:** Global Politics

### D9: Psychology
- **PSYC 1A:** General Psychology
- **PSYC 16:** Health Psychology
- **PSYC 17:** Abnormal Psychology
- **PSYC 20:** Cross-Cultural Psychology

### D10: Sociology and Criminology
- **GERO 75:** Death & Dying
- **SOC 1:** Introduction to Sociology
- **SOC 15:** Sociology of Mass Media
- **SOC 22:** Sociology of Aging
- **SOC 25:** Sociology of Minorities
- **SOC 30:** Sociology of Gender
- **SOC 70:** Social Welfare

**AMERICAN HISTORY AND GOVERNMENT REQUIREMENTS FOR GRADUATION FROM A CSU CAMPUS**

Completion of a course in American History and a course in American Government is a requirement to graduate from any of the 23 CSU universities. At Shasta College, HIST 17A or 17B or ECON 17 and POLS 2 will satisfy the requirement.

**CATEGORY E:** Students shall select a minimum of three (3) units in lifelong understanding and development of themselves as integrated physiological, social and psychological entities.

### E1
- **BIOL 60:** Biology of Aging
- **ECE 1:** Human Development
- **ECE 9:** Child Growth & Development
- **FSS 16:** Marriage and Family
- **FSS 18:** Adulthood and Aging
- **FSS 25:** Nutrition
- **FSS 26:** Nutrition Through the Life Span
- **FSS 60:** Life Management
- **GERO 75:** Death & Dying
- **HLTH 1:** Health and Wellness
- **HLTH 2:** Nutrition and Fitness
- **STU 1:** College Success

**CHICO STATE** requires two courses to satisfy the U.S. Diversity & Global Cultures requirement. Both courses may be part of the 39-unit General Education requirement.

- a. Courses with one asterisk (*) meet the U.S. Diversity requirement and are “concerned primarily with the aspirations and history of ethnic subcultures”. They are ANTH 25, CMST 20, ENGL 18, ENGL 24, HIST 25, HIST 35, SOC 25, and GEOG 7, PSYC 20, PSYC 41.
- b. Courses with two asterisks (**) meet the Global Cultures requirement and are “concerned primarily with cultures and societies outside Western Heritage”. They are ANTH 2, ANTH 14, ARCH 3, HIST 36, HIST 38, ENGL 10A, ENGL 10B, ENGL 20, ART 4, GEOG 1B, GEOG 8, MUS 14 and POLS 20.

Courses taken for CSU General Education are applied to categories based on the General Education list for the year they are completed.

This is the approved list for courses taken Fall 2010 through Summer 2011. See www.assist.org for prior years.

9/1/10
IGETC courses must be completed with a "C" grade or better (P is acceptable).

### AREA 1 - ENGLISH COMMUNICATION

<table>
<thead>
<tr>
<th>Group A: English Composition (one course)</th>
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</thead>
<tbody>
<tr>
<td>ENGL 1A: College Composition</td>
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<table>
<thead>
<tr>
<th>Group B: Critical Thinking/English Composition (one course)</th>
</tr>
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<tbody>
<tr>
<td>ENGL 1B: Literature and Composition</td>
</tr>
<tr>
<td>ENGL 1C: Critical Reasoning, Reading and Writing</td>
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</tbody>
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**FOR CSU ONLY:**

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<tr>
<th>Group C: Oral Communication (one course)</th>
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<tbody>
<tr>
<td>CMST 10: Interpersonal Communication</td>
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<tr>
<td>CMST 54: Small Group Communication</td>
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| CMST 60: Public Speaking                                                   |

### AREA 2 - MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING (one course):

<table>
<thead>
<tr>
<th>MATH 2: Pre-Calculus</th>
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<tbody>
<tr>
<td>MATH 3A: Calculus+</td>
</tr>
<tr>
<td>MATH 3B: Calculus</td>
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</tbody>
</table>

| MATH 4A/4B: Calculus/Diff. Equations                                    |
| MATH 6: Linear Algebra                                                 |
| MATH 8: Finite Math                                                    |
| MATH 9: Survey of Calculus+                                            |

| MATH 13: College Algebra                                               |
| MATH 14: Intro to Statistics                                          |
| MATH 17: Calc. App. Soc. Life Sciences                                 |

### AREA 3 - ARTS AND HUMANITIES (three courses; at least one course from the Arts and one from the Humanities):

**ARTS:**

| ART 1: Introduction to Art                                              |
| ART 2: History of Western Art                                           |
| ART 3: History of Western Art                                           |
| ART 4: World Art                                                       |

| ART 6: History of Modern Art                                            |
| ART 10: Music Appreciation                                             |
| ART 11: History of Jazz and Rock                                       |
| ART 14: World Music                                                    |

| HUMANITIES:                                                            |
| ENGL 10A/B: World Literature                                            |
| ENGL 11A/B: Survey of American Lit.                                    |
| ENGL 12: Intro to Short Fiction                                        |
| ENGL 13A/B: Survey of English Lit.                                     |
| ENGL 14: Survey of Drama as Lit                                        |
| ENGL 15: Lit. and About Women                                          |
| ENGL 16: Poetry                                                       |
| ENGL 17: Intro to Shakespeare                                         |
| ENGL 18: African American Literature                                   |
| ENGL 19: Survey of the Bible as Literature                             |
| ENGL 20: World Mythology                                               |
| ENGL 24: Multicult. Persp in Amer. Lit.                                |

| ENGL 25: Linguistics                                                   |
| ENGL 33: Fiction and Film                                              |
| ENGL 36: Children’s Lit                                               |
| FREN 2: Elementary French                                              |
| FREN 3/4: Intermediate French                                          |
| GERM 2: Elementary German                                              |
| GERM 3/4: Intermediate German                                          |
| HIST 25: African American History                                      |
| JAPN 2: Elementary Japanese                                           |
| JAPN 3/4: Intermediate Japanese                                       |
| JPN 2: Elementary Spanish                                              |
| JPN 3/4: Intermediate Japanese                                         |
| SPAN 2: Elementary Spanish                                             |
| SPAN 3/4: Intermediate Spanish                                         |

| HUM 2: Exploring Humanities                                            |
| HUM 4: Humanities Through the Film                                    |
| HUM 70: Exploring Contemporary TV                                     |
| PHIL 6: Intro. to Philosophy                                           |
| PHIL 7: Ethics: Understand RightWrong                                  |
| PHIL 10: Life and Death Moral Issues                                  |
| RUSS 2: Elementary Russian                                            |
| RUSS 3: Intermediate Russian                                          |
| SL 92: American Sign Language II                                      |
| SL 94: American Sign Language III                                     |

### AREA 4 - SOCIAL AND BEHAVIORAL SCIENCES (three courses from at least two disciplines):

| ANTH 2: Cultural Anthropology                                          |
| ANTH 3: Principles of Archaeology                                     |
| ECE 1: Human Development                                               |
| ECE 9: Child Growth and Development                                    |

| ECON 1A: Prin. of Economics (Micro)                                    |
| ECON 1B: Prin. of Economics (Macro)                                    |
| ECON 2: Economic Issues and Policies                                   |
| GEOG 1A: Physical Geog                                                 |
| GEOG 1B: Cultural Geography                                            |
| GEOG 2: California Geography                                           |
| GEOG 8: World Geography                                                |

| GER 75: Death and Dying                                               |
| HIST 1A: History of Western Civilization                              |
| HIST 1B: History of Western Civilization                              |
| HIST 3: World Civilization 1500 to Present                            |
| HIST 17A: U.S. History and Government                                 |
| HIST 17B: U.S. History and Government                                 |
| HIST 17C: U.S. History and Government                                 |
| HIST 25: African American History                                     |
| HIST 27: World History of Mexican Americans                           |
| HIST 36: History of the Far East                                      |
| HIST 38: History of World Religions                                   |
| HIST 40: History & Government of CA                                   |
| HIST 51: History of the American Frontier                             |
| HIST 57: Russian History of 20th Century                              |
| PSYC 1A: General Psychology                                           |
| PSYC 5: Human Sexuality                                               |
| PSYC 14: Understand. Human Behavior                                   |
| PSYC 15: Social Psychology                                            |
| PSYC 17: Abnormal Psychology                                          |
| PSYC 20: Cross-cultural Psychology                                    |
| PSYC 41: Cultural/Soc Context-Chilhood                                |
| PSYC 46: Human Memory & Learning                                      |
| SOC 1: Introduction to Sociology                                     |
| SOC 2: Social Problems                                                |
| SOC 15: Sociology of Mass Media                                      |
| SOC 22: Sociology of Aging                                            |
| SOC 25: Sociology of Minorities                                       |
| SOC 30: Sociology of Gender                                          |

+Transfer credit may be limited by either UC or CSU or both (usually due to duplication of content). Students should consult with a counselor for additional information.
AREA 5 - PHYSICAL AND BIOLOGICAL SCIENCES (two courses, one Physical Science and one Biological Science for a minimum of 7 units; at least one course must include a laboratory (underlined))

PHYSICAL SCIENCES:
ASTR 1: Astronomy
CHEM 1A: General Chemistry
CHEM 1B: General Chemistry
CHEM 2A: Intro to Chemistry+
CHEM 2B: Intro to Org & Bio Chemistry+
CHEM 6: Intro to Chem Applied Env
CHEM 10: Chemistry for Liberal Arts+
CHEM 11: Chemistry Lab/Liberal Arts+
CHEM 16: Chemical Problem Solving
CHEM 70, 71: Organic Chemistry
ESCI 2: Historical Geology
ESCI 3: Mineralogy & Crystal Optics
ESCI 4: Rock Origins & Relationships
ESCI 5: Introduction to Geology+
ESCI 6: Ancient Life
ESCI 7: Intro to Geology of California
ESCI 8: Planetary Geology
ESCI 9: Earthquakes, Volcanoes
ESCI 10: Environmental Geology
ESCI 12: Earth Science Survey+
ESCI 14: Meteorology

BIOLOGICAL SCIENCES:
AGNR 60: Environmental Science
AGNR 61: Environmental Science Lab
AGPS 20: Plant Science
ANTH 1: Human Anatomy
ANTH 1: Physical Anthropology
BIOL 5: Intro to Human Biology+
BIOL 6: Intro to Human Biology Lab+
BIOL 10: General Biology+
BIOL 14: Heredity (PHY 10)
BIOL 15: Entomology (ZOOL 15)

AREA 6 - LANGUAGE OTHER THAN ENGLISH
Proficiency is required by UC. CSU transfers do not need to meet this requirement. Proficiency is defined as two years of high school study in the same language with a "C" grade or better. If you have not satisfied this requirement in high school, you must take one of these courses:

CHIN 1: Mandarin Chinese
FREN 1: Elementary French
GERM 1: Elementary German
JAPN 1: Elementary Japanese
RUSS 1: Elementary Russian
SL 90: American Sign Language I

CSU GRADUATION REQUIREMENT IN U.S. HISTORY AND AMERICAN IDEALS (Two courses, one from each group):

GROUP 1:
ECON 17: Economic History of the United States
HIST 17A: U.S. History
HIST 17B: U.S. History

GROUP 2:
POLS 2: Introduction to American Government

+Transfer credit may be limited by either UC or CSU or both (usually due to duplication of content). Students should consult with a counselor for additional information.

This is the approved list for courses taken Fall 2010 through Summer 2011. See www.assist.org for prior years.
Choose one GE Option, one Emphasis, and transferable electives to total 60 units for the AA degree.

- **General Education – Choose Option 1, 2 or 3.**
  - **OPTION 1: IGETC** (Intersegmental General Education Transfer Curriculum)
    - Students who are planning to transfer to the University of California system or who are undecided about whether to transfer to a UC or CSU may satisfy general education requirements with IGETC.
    1. Complete the 33 – 37 unit IGETC pattern.
    2. Complete all IGETC courses with a grade of “C” or better.
    3. Complete additional courses from an emphasis to meet the lower division requirements in your major and then electives to reach 60 units. UC transfer students must select all 60 units from courses on the UC transferable course list. (See www.assist.org)
    4. Achieve a minimum grade point average of 2.0. [UC will require a minimum transfer GPA of 2.4. A higher GPA will be required for admission to most campuses and for high demand majors.]
  - **OPTION 2: CSU GE** (California State Universities – General Education)
    - Students who are planning to transfer to one of the 23 campuses of the California State University system may satisfy general education requirements with the CSU pattern.
    1. Complete the 39-unit CSU GE pattern.
    2. Complete Communication, English, Critical Thinking, and Math requirements (Area A1, A2, A3 and B4) each with a grade of “C” or better.
    3. Recommend completion of HIST 17A or 17B or ECON 17, and POLS 2 prior to transfer. These two courses are CSU graduation requirements and may be included as part of the 39-unit pattern.
    4. Complete additional courses from an emphasis to meet the lower division requirements in your major and then electives to reach 60 units.
    5. Achieve a minimum grade point average of 2.0 [A higher GPA will be required for admission to some campuses and for high demand and impacted majors.]
  - **OPTION 3: Independent, Out-of-state universities, and high unit/specialized majors**
    - Complete 30 units to satisfy a GE-modified plan (use the CSU pattern as a guide) including one course from each of the following areas:
      
      | A1: Oral Communication |
      | A2: English 1A         |
      | B1 or B2: Science course |
      | B4: Transfer-level math course |
      | C1 or C2: Arts or Humanities |
      | D: Social, Political and Economic institutions, and Behavior |
      | Multi-cultural course |

    Select additional courses from areas A3, B, C, D, or E from two different areas to total 30 or more GE units.

  - **Emphasis:** Choose one of the University Studies emphases of 18 or more units to correspond with your choice of transfer major. Note that each university determines its own list of courses required for the major, so completion of an emphasis does not guarantee that all transfer major courses have been completed nor does it guarantee admission to the University. See a Counselor for comprehensive planning.
  - **Electives:** Complete transferable electives to total 60 or more transferable units.

### Areas of Emphasis

#### Agriculture Sciences – 18 units

The emphasis in Agriculture Sciences is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in Agriculture, Agriculture Business, and Horticulture.

Select 12 – 18 units (see a counselor to select the courses appropriate for your transfer university):

| AGAB 51 | Agriculture Accounting |
| AGAB 54 | Agriculture Economics |
| AGAS 11 | Livestock Feeding and Nutrition |
| AGAS 19 | Animal Science |
| AGPS 20 | Plant Science |
| AGPS 24 | Soils |
| CHEM 2A | General Chemistry |

Select the remaining 0 – 6 transferable units from the following courses:

AG 1, 6, 9, 58, 94, 97, 98; AGAS 10, 11, 15, 17, 19, 30; AGEH 22, 23, 26, 27, 28, 29, 31, 31.1, 31.2, 31.3, 33, 34, 35, 36, 37, 38, 39, 30, 41, 44, 45, 46, 60, 70, 71, 72, 75, 94, 97, 98; AGEQ 12, 13, 14, 21; AGMA 42, 44; AGNR 1, 4, 6, 10, 11, 12, 50, 51, 52, 53, 55, 60, 61, 64, 65, 66, 67, 69, 70, 83, 93, 94, 97; AGPS 25; AGSA 50, 56; AGVETT 1, 2, 3, 4, 5, 6, 7, 16; AGVIT 80, 81; CHEM 2B; MATH 14

#### Allied Health – 20 units

The emphasis in Allied Health is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in Nursing or in other allied health fields.

Complete the following:

| ANAT 1 | Human Anatomy |
| CHEM 2A | Introduction to Chemistry |
| MICR 1 | Microbiology |
| PHY 1 | Physics |

#### Behavioral Science (2003) – 18 units

The Behavioral Sciences focus on the understanding of human beings, their actions and interactions, decision making processes, communication strategies, and the methods of inquiry used in the field. The A.A. in University Studies, Behavioral Sciences emphasis is a good option for students wishing to transfer to a four-year college or university to pursue a baccalaureate degree in anthropology, psychology, social work, and sociology.

Complete the following:

| PSYC 1A | General Psychology |
| MATH 14 | Statistics |
| SOC 1 | Intro to Sociology |
| BIOL 1, 5, 6, 10, or PHY 1 | |
| ANTH 2 | Cultural Anthropology |
| ECE 1 | Human Development |
Biological Sciences - 18 units

The Biological Sciences emphasis is designed to provide the lower division major preparation for transfer in Biological Sciences.

Complete the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1</td>
<td>Principles of Biology</td>
</tr>
<tr>
<td>BOT 1</td>
<td>General Botany</td>
</tr>
<tr>
<td>ZOOL 1</td>
<td>General Zoology</td>
</tr>
<tr>
<td>CHEM 1A</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>CHEM 1B</td>
<td>General Chemistry</td>
</tr>
</tbody>
</table>

Business Administration (0505) – 18 units

The emphasis in Business Administration is designed to provide students with the common core of lower division courses required by most universities to transfer and pursue a baccalaureate degree in Business Administration. This includes business degrees with options such as accounting, finance, human resources management, international business, management, operations management, and marketing. See a counselor before selecting your electives.

Complete the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>ACCT 4</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>ECON 1A</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 1B</td>
<td>Principles of Macroeconomics</td>
</tr>
</tbody>
</table>

Select 6 units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH</td>
<td></td>
</tr>
<tr>
<td>BUAD</td>
<td></td>
</tr>
<tr>
<td>CIS</td>
<td></td>
</tr>
</tbody>
</table>

Child Development - 18 units

The Child Development emphasis is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in Child Development or Early Childhood Education.

Complete the following 12 units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 1</td>
<td>Human Development OR</td>
</tr>
<tr>
<td>ECE 9</td>
<td>Child Growth and Development</td>
</tr>
<tr>
<td>ECE 2</td>
<td>Child, Family, and Community</td>
</tr>
<tr>
<td>ECE 7</td>
<td>Early Childhood Observation and Assessment</td>
</tr>
<tr>
<td>ECE 15</td>
<td>Child Health, Safety and Nutrition</td>
</tr>
</tbody>
</table>

Choose 6 additional units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE</td>
<td></td>
</tr>
</tbody>
</table>

Criminal Justice (2105) – 18 units

The emphasis in Criminal Justice is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in Criminal Justice.

Complete the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 10</td>
<td>Intro to Administration of Justice</td>
</tr>
<tr>
<td>ADJU 15</td>
<td>Concepts of Criminal Law</td>
</tr>
</tbody>
</table>

Select 12 additional transferable units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU</td>
<td></td>
</tr>
<tr>
<td>MATH</td>
<td></td>
</tr>
<tr>
<td>PSYC</td>
<td></td>
</tr>
<tr>
<td>SOC</td>
<td></td>
</tr>
<tr>
<td>LEGL</td>
<td></td>
</tr>
</tbody>
</table>

Earth System Science (4902) – 22 units

Earth System Sciences represents an emerging trend in the sciences and many universities offer a degree or option along this track (i.e. Earth Science, Planetary Science). This academic plan is intended to support the transfer student interested in the bachelor's degree as it includes courses that define major portions of the Earth System, including geosphere, hydrosphere, atmosphere, and biosphere focused courses, and Earth's position in space.

Complete the following course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESCI 17</td>
<td>Earth System Science</td>
</tr>
</tbody>
</table>

And select 11 or more units from the following to include at least two courses that focus on different portions of the Earth System (geosphere, hydrosphere, atmosphere, and biosphere):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGNR</td>
<td></td>
</tr>
<tr>
<td>ASTR</td>
<td></td>
</tr>
<tr>
<td>BIOL</td>
<td></td>
</tr>
<tr>
<td>ESCI</td>
<td></td>
</tr>
</tbody>
</table>

Engineering (0901) – 26 units

The emphasis in Engineering is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in the various fields of engineering. This includes Civil Engineering, Computer Engineering, Electrical Engineering, and Mechanical Engineering. See a counselor for the complete list of courses required for your engineering field and university -- the requirements typically total many more than 26 units and the general education areas are usually modified (see option #3).

Complete the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3A</td>
<td>Calculus</td>
</tr>
<tr>
<td>MATH 3B</td>
<td>Calculus</td>
</tr>
<tr>
<td>MATH 4A</td>
<td>Calculus</td>
</tr>
<tr>
<td>PHYS 4A</td>
<td>Physics (Mechanics)</td>
</tr>
<tr>
<td>PHYS 4B</td>
<td>Physics (Electricity and Magnetism)</td>
</tr>
</tbody>
</table>

Select 6 units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM</td>
<td></td>
</tr>
<tr>
<td>ENGR</td>
<td></td>
</tr>
<tr>
<td>MATH</td>
<td></td>
</tr>
<tr>
<td>PHYS</td>
<td></td>
</tr>
</tbody>
</table>

Geology (1914) – 20 units

Geology is a field-based study of earth materials, processes and history. All courses in this plan apply theory to field situations and the degree requires the completion of field-based classes. This approach should adequately prepare the transfer student for further and more intensive field experiences as they work to complete the bachelor's degree at a 4-year school.

Complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESCI 1</td>
<td>Physical Geology</td>
</tr>
<tr>
<td>ESCI 2</td>
<td>Historical Geology or Ancient Life</td>
</tr>
</tbody>
</table>

And select one combination of the following Earth Science field courses to total 3 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESCI 26</td>
<td></td>
</tr>
<tr>
<td>ESCI 27</td>
<td></td>
</tr>
</tbody>
</table>

Any two 30-series ESCI courses OR Any three 40-series ESCI courses OR ESCI 26 or 27 and one 40-series ESCI course.

Select the remaining transferable units from the following list to include at least one additional science course:

Geology Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ESCI</td>
<td></td>
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</table>

Courses from supporting disciplines:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>AGNR</td>
<td></td>
</tr>
<tr>
<td>CHEM</td>
<td></td>
</tr>
<tr>
<td>CIS</td>
<td></td>
</tr>
<tr>
<td>GIS</td>
<td></td>
</tr>
<tr>
<td>MATH</td>
<td></td>
</tr>
<tr>
<td>NHIS</td>
<td></td>
</tr>
<tr>
<td>PHYS</td>
<td></td>
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</tbody>
</table>

Select the remaining transferable units from the following list to include at least one additional science course:

Geology Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESCI</td>
<td></td>
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</tbody>
</table>

Courses from supporting disciplines:

<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
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<tr>
<td>CIS</td>
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<tr>
<td>GIS</td>
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<tr>
<td>MATH</td>
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<tr>
<td>NHIS</td>
<td></td>
</tr>
<tr>
<td>PHYS</td>
<td></td>
</tr>
</tbody>
</table>
Humanities (4903) – 18 units
These courses emphasize the study of cultural, literary, humanistic activities and artistic expression of human beings. With careful planning, the Humanities emphasis will satisfy the lower division major courses to transfer to a university and earn a Bachelor's degree in the various fields of Humanities.

Select 18 transferable units from at least 3 of the following disciplines:

- ART 1, 2, 3, 4, 6, 12, 21A
- ENGL 1B, 10AB, 11AB, 12, 13AB, 14, 15, 16, 17, 18, 19, 20, 24, 25, 31, 33, 36, 91
- Foreign Lang.  (French, German, Japanese, Russian, Sign Lang., Spanish)
- HUM 2, 4, 70
- MUS 1, 2, 3, 4, 5, 7, 10, 11
- PHIL 6, 7, 8, 10
- THTR 1, 5, 8, 9, 12, 13, 30, 31, 33, 34, 37
- CMST 30
- DAN  (up to 3 units of Dance may apply to the emphasis)

Language Arts (1502) – 18 units
With careful planning, the Language Arts emphasis will satisfy the lower division major courses to transfer to a university and earn a Bachelor's degree in the various fields of Language Arts.

Select 18 transferable units from at least two areas:

- CMST 10, 20, 30, 40, 54, 60
- ENGL 1B, 1C, 10AB, 11AB, 12, 13AB, 14, 15, 16, 17, 18, 19, 20, 24, 25, 31, 33, 36, 91
- Foreign Languages:
  - FREN 1, 2, 3, 4
  - GERM 1, 2, 3, 4
  - JAPN 1, 2, 3, 4, 19, 20
  - RUSS 1, 2, 3, 4
  - SPAN 1, 2, 3, 4, 19, 20
  - SL 90, 91, 92, 93, 94, 95, 96
- JOUR 21, 27, 29

Liberal Studies – Elementary Teacher Prep (4901) – 34 units
The Liberal Studies emphasis prepares students to transfer as a Liberal Studies major to campuses of the California State University System. This is the bachelor's degree major students select to prepare as an elementary school teacher and earn a multiple subjects credential. The emphasis aligns with the Lower Division Transfer Pattern (LDTP) of the CSU system. See a counselor for this major – many if not all courses satisfy the general educational pattern.

Complete the following:
- CMST 60 Public Speaking
- PHSC 1 and/or Physical Science Survey
- ESCI 12 Earth Science Survey
- BIOL 10 General Biology
- MATH 41A and/or B  Concepts of Elementary Math
- GEOG 8 World Regional Geography
- HIST 2 World Civilization to 1500 C.E.
- HIST 17A US History
- POLS 2 American Government

Choose 0-6 units from:
- ANTH 2
- ECE 1
- EDUC 1
- EDTE 51, 52, 61, 62, 71, 72, 73
- GEOG 7
- HIST 3, 17B

Mathematics – 19 units
The Mathematics emphasis is designed to provide lower division major courses to transfer to a university and pursue a baccalaureate degree in mathematics.

Complete the following:
- MATH 3A Calculus 3A
- MATH 3B Calculus 3B
- MATH 4A Calculus 4A
- MATH 4B Differential Equations
- MATH 6 Linear Algebra
- MATH 14 Intro to Statistics

Meteorology/Climatology (4902.00) – 18 units
Many universities offer an Atmospheric Science degree or option and this academic plan is intended to support the transfer student interested in that bachelor's degree. Courses in this plan produce a foundation to transfer in such studies as weather and climate challenges that face society now and into the future.

Complete the following courses:
- ESCI 17 Earth System Science
- ESCI 18 Global Climate

Select the remaining transferable units from the following list to include at least one additional science course:

- Related Science Courses:
  - ASTR 1
  - CHEM 1B
  - ESCI 10, 15
  - AGNR 60, 61
  - NHIS 15
  - PHYS 2B

- Courses from supporting disciplines:
  - AGNR 1, 83
  - CIS 1
  - GIS 1, 10, 22
  - MATH 3B, 14

Multicultural Studies (2202.10) – 18 units
This emphasis expands a student's understanding of other cultures and is good preparation for university majors in Multicultural Studies, Ethnic studies, and International relations. With careful planning it could be also be used for students interested in International Business, geography, and secondary teaching. Students in the Multicultural Studies program will be exposed to a diversity of non-western cultures, an increasingly valuable knowledge base in our global society.

Select 18 units from at least 3 different disciplines:
- ANTH 2, 14, 25
- ART 4
- CMST 20
- ENGL 10A, 10B, 18, 20, 24
- GEOG 1B, 7, 8
- HIST 25, 35, 36, 38
- POLS 20, 25
- PSYC 20, 41
- SOC 25

Natural Sciences (4902) – 18 units
The Natural Sciences emphasis is designed to provide lower division major courses to transfer to a university and pursue baccalaureate degrees in life science and physical science areas.

Select 18 transferable units from the following disciplines:
- AGAS 19
- AGEH 33
- AGNR 60, 61, 67
- AGPS 20
- ANAT 1
- ASTR 1
- BIOL 1, 5, 6, 10, 11, 12, 14, 60
- BOT 1
- CHEM 1A, 1B, 2A, 2B, 10, 11, 70, 70A, 71, 71A
- ESCI 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 17, 18
- FSS 25
- MICR 1
- NHIS 15
- PHSC 1
- PHY 1
- PHYS 2A, 2B, 4A, 4B, 4C
- ZOO 1
Oceanography (1919) – 22 units
This degree plan identifies courses needed for a student to transfer into any of the marine sciences. The associate degree emphasizes a multidisciplinary approach as a foundation that can then be applied to an Oceanography bachelor’s degree or a more specialized bachelor’s degree such as Marine Biology or Marine Fisheries.

Complete the following courses:
- **BIOL 1** Principles of Biology
- **ESCI 1** Physical Geology
- **ESCI 15** Oceanography
- **ESCI 16** Coastal Oceanographic Field Studies

Select the remaining 8 units from the following transferable courses to include at least one additional science course:
- **Related Science Courses**:
  - AGNR 60/61
  - BIOL 12
  - CHEM 1B
  - ESCI 10, 17, 37, 38
  - NHIS 15, 65
  - PHYS 2B

- **Courses from supporting disciplines**:
  - AGNR 1, 83
  - CIS 1
  - GIS 1, 10, 22
  - MATH 3B, 14

Science Teacher Track, Concentration in Earth Sciences (4901.20) - 20 units
This degree plan prepares the student to transfer as they prepare for a Single Subject Teaching Credential in Science, Earth Science Concentration. Courses in this plan are designed to develop breadth and to demonstrate multidisciplinary aspects across the Earth Sciences.

Complete the following courses:
- **ESCI 1** Physical Geology
- **ESCI 2 or 6** Historical Geology or Ancient Life

Select the remaining 12 units from the following list to include at least six units from science courses:
- **Science courses**:
  - AGNR 60/61
  - ASTR 1
  - CHEM 1B
  - ESCI 7, 9, 10, 14, 15, 17, 18, 32, 33, 34, 35, 36, 37, 38, 42, 43, 44, 45, 46
  - NHIS 15, 65
  - PHYS 2B

- **Courses from supporting disciplines**:
  - AGNR 1, 83
  - CIS 1
  - GIS 1, 10, 22
  - MATH 3B, 14

Physical Sciences (4902) – 22 units
The Physical Sciences emphasis is designed to provide students with the lower division major courses to transfer to a university and pursue baccalaureate degrees in chemistry, geology, physics, and related areas. See a counselor for the complete list for your choice of transfer university and major.

Complete the following:
- **CHEM 1A and 1B**
- **PHYS 2A + 2B** or **PHYS 4A + 4B**
- **MATH 3A**

Quantitative Reasoning – 18 units
The quantitative reasoning emphasis is a flexibly designed option which, with proper counseling, provides transfer coursework toward majors in computer science and math.

Select a minimum of 18 units from the following mathematics and computer science courses:
- **MATH 2, 3A, 3B, 4A, 4B, 6, 9, 10, 13, 14**
- **CIS 2, 60, 61, 62, 63, 72**

Social Sciences (2201) - 21 units
The A.A. in University Studies, Social Sciences emphasis is designed to provide students with a strong foundation for the study of humanity from diverse perspectives. It is an excellent starting point for students interested in pursuing baccalaureate degrees in anthropology, history, political science, psychology, sociology.

Select 9 units from 3 different disciplines:
- **ANTH 2**
- **ARCH 3, 4A**
- **ECE 1, 2, 9**
- **ECON 1A, 1B, 2, 17**
- **FSS 16, 18**
- **GEOG 1A, 1B, 7, 8**
- **HIST 1A, 1B, 2, 3, 17, 17A, 17B, 25, 35, 36, 38, 40, 55, 57**
- **MATH 14**
- **PHYS 5**
- **POLS 1, 2, 20, 25**
- **PSYC 1A, 5, 15, 16, 17, 20, 41, 46**
- **SOC 1, 2, 15, 22, 25**

World Languages (1101) – 18 units
The World Languages emphasis is recommended for students pursuing intermediate fluency in a world language to facilitate communication in professional settings or to begin the first two years of a language or literature major and transfer to a university.

Select 13 units (or through level 4) of a foreign language:
- **FREN 1, 2, 3, 4**
- **GERM 1, 2, 3, 4**
- **JAPN 1, 2, 3, 4**
- **RUSS 1, 2, 3, 4**
- **SL 90, 91, 92, 93, 94, 96**
- **SPAN 1, 2, 3, 4**

Select the remaining 0 – 5 units from:
- **ENGL 10AB, 25**
- **FREN 1, 2, 3, 4**
- **GERM 1, 2, 3, 4**
- **JAPN 1, 2, 3, 4, 19, 20**
- **RUSS 1, 2, 3, 4**
- **SL 90, 91, 92, 93, 94, 96**
- **SPAN 1, 2, 3, 4, 19, 20**
Degrees and Certificates

NOTE: Please check with your counselor and/or division office regarding sequence of course offerings for degrees and certificates.

Accounting Clerk/Bookkeeper
Completion of the Certificate Program will prepare the student for entry-level position in accounts receivable, accounts payable, payroll, and general ledger.

REQUIREMENTS FOR CERTIFICATE:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Basic Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 103</td>
<td>PC Accounting</td>
<td>2</td>
</tr>
<tr>
<td>ACCT 104</td>
<td>Payroll Accounting</td>
<td>2</td>
</tr>
<tr>
<td>BUAD 10</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 56</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Math</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 166</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>OAS 166</td>
<td>Records Management</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE: 28.5

► Student may take ACCT 2 in place of ACCT 101 or ACCT 102

Administration of Justice

The Administration of Justice Program (AOJ) is designed to provide professional courses in AOJ fields for the pre-service student, and for the criminal justice employee preparing for promotional exams or to upgrade or maintain skills and knowledge. At Shasta College, you will receive occupational training for both the entrance and promotional levels of AOJ agencies and allied services. With additional general education courses, you will also be able to fulfill the requirements to transfer to a four-year college with junior standing. A variety of agencies exist at the federal, state and local levels of government; and also through private industry.

The Modular Basic Police Academy consists of three courses: 1) ADJU 131, Level III, 144 hours, offered in the evenings during the Fall semester with some weekend hours; 2) ADJU 132, Level 11, 189 hours, offered on weekends during the Spring semester, with some evening hours; and 3) Butte Community College Level I, 350+ hours offered on weekends during the Summer, Fall and Spring. Students successfully completing the above three courses are regular police-academy trained.

A student must maintain a “C” AVERAGE in course work applying to the Administration of Justice degree.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

CORE COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 10</td>
<td>Introduction to Admin. of Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 15</td>
<td>Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 16</td>
<td>Legal Aspects of Evidence</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 17</td>
<td>Principles and Procedures of the Justice System</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 18</td>
<td>Community Relations</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 20</td>
<td>Principles of Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 23</td>
<td>Career Planning for Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 26</td>
<td>Courtroom Testimony/Report Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

RESTRICTED ELECTIVE COURSES (Choose six units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>ADJU 11</td>
<td>Traffic Control and Investigation</td>
<td>3</td>
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<tr>
<td>ADJU 21</td>
<td>Police Field Operations</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 22</td>
<td>Juvenile Procedures 3</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 24</td>
<td>Multi-Cultural Issues/Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 25</td>
<td>Substantive Law</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 30</td>
<td>Wildlife Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 40</td>
<td>Institutional and Field Services</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 41</td>
<td>Fundamentals of Crime and Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 42</td>
<td>Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
</tbody>
</table>

*May be used to fulfill General Education requirements. See a counselor.

Agriculture – Agricultural Business

The Agricultural-Business major is designed for students interested in working in the area of agricultural-related business. Career opportunities in agricultural business may include careers with the U.S. Department of Agriculture or Resource Conservation Service or a career in ranch or farm management, banking, agricultural credit, agricultural insurance, consulting firms, or agricultural product distribution and sales. The employment opportunities are many. “Agri” Business is the largest business sector in the world as statistics show that it takes at least 16 people to keep one farmer in business. These people are involved in all phases of agriculture from the production and marketing of everything from the feed to seed, equipment and machinery to the crops, feed, production loans, and crop insurance and so on. In the state of California, agriculture is the #1 commodity which further increases our student’s employment opportunities. This degree is designed to give students a broad understanding of the agriculture industry, as it is much easier for a student who has sold foundation in agriculture to be successful in the world of agricultural business as “agri” business differs from other business sectors as much of the time the commodities that are marketed and sold are perishable.

This program also prepares students for transfer to an Agriculture Business program at a four-year university. Students who plan to transfer should talk to a counselor or advisor to select appropriate general education and elective courses that will meet the requirements of the chosen university program

Pending Chancellor’s Office Approval

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

CORE COURSES:

<table>
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<tr>
<th>Course</th>
<th>Description</th>
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<tr>
<td>AG 1</td>
<td>Career Planning for Agriculture</td>
<td>2</td>
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<tr>
<td>AG 6</td>
<td>Career Placement – Ag and Natural Resources</td>
<td>1</td>
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<tr>
<td>AG 9</td>
<td>Agriculture and Natural Resources Leadership</td>
<td>1</td>
</tr>
<tr>
<td>AG 84</td>
<td>Worksite Learning-Agriculture OR</td>
<td></td>
</tr>
<tr>
<td>AG 58</td>
<td>Student Enterprise Projects</td>
<td>1</td>
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<tr>
<td>AGAB 53</td>
<td>Introduction to Agriculture Business</td>
<td>3</td>
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<tr>
<td>AGAS 11</td>
<td>Livestock Feeding and Nutrition</td>
<td>3</td>
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<tr>
<td>AGAS 19*</td>
<td>Animal Science</td>
<td>3</td>
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<tr>
<td>AGMA 44</td>
<td>Intro. to Const. Skills for Ag and Nat. Resources</td>
<td>3</td>
</tr>
<tr>
<td>AGPS 20*</td>
<td>Plant Science</td>
<td>4</td>
</tr>
<tr>
<td>AGPS 24*</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>AGSA 56</td>
<td>Intro. to Sustainable Ag and Farm Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose nine units from the following Ag Business courses:

AGAB 51 Agriculture Accounting (3)
AGAB 54* Agriculture Economics (3)
AG 94 Principles of Economics (3) OR
AG 92 Computers for Agriculture and Natural Resources (3)
ENGL 1A* College Composition (4)
CMST 60 Public Speaking (3) OR
CMST 54 Small Group Communication (3)
MATH 102* Intermediate Algebra (5) OR
AG 52 Computers for Agriculture and Natural Resources (3)
MATH 13* College Algebra (3) OR
MATH 14* Introduction to Statistics (3)

*May be used to fulfill General Education requirements. See a counselor.

Associate in Science Degree Requirements

Major 36
General Education 21**
Electives & Graduation Requirements (to total at least 60)

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.

1. Students planning to transfer to a college or university should consult a counselor or Agriculture faculty regarding transfer requirements.

TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM A.S. DEGREE REQUIREMENTS.

2. Sixty (60) units are required for the AS Degree. All graduation requirements are met.
Agriculture – Environmental Horticulture Transfer Degree

The Environmental Horticulture Transfer Degree is a 2+2 program providing students the opportunity to complete all lower division coursework at Shasta College for a B.S. degree in Environmental Horticulture at CSU Chico. This is a special major at Chico State and is only available to transfer students. Students interested in more details about this degree should contact the Horticulture Dept at 242-2210.

While completing transfer requirements, students will also receive training adequate for job placement in areas of landscape management, wholesale and retail nursery and related horticultural fields.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

CORE COURSES:
- AGEH 6 Career Placement – Ag and Natural Resources 1
- AGEH 22 Nursery Practices and Plant Propagation 2
- AGEH 23 Nursery Practices and Management 2
- AGEH 27, 28 & 29 Plant Identification and Taxonomy 3
- AGEH 31 Landscape Irrigation 3
- AGEH 33 Environmental Horticulture OR 3
- AGPS 20 Plant Science 3
- AGPS 35 Landscape Design 3
- AGEH 38 Landscape and Turf Management 3
- AGMA 44 Introduction to Construction Skills for Ag/Nat Res. 3
- AGPS 24 Soils 3
- CHEM 2A Introduction to Chemistry 5
- CMST 54 or A1* Small Group Communication 3
- ENGL 1A* College Composition 4
- HIST 17A or 17B* U.S. History and Government 3
- MATH 14* Introduction to Statistics 3
- POLS 2* Introduction to American Government 3
- SPAN 1 or C2* Elementary Spanish 3

Note: All courses must be completed with a grade of C or higher

*May be used to fulfill General Education requirements. See a counselor.

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Major</th>
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</thead>
<tbody>
<tr>
<td>General Education</td>
<td>21**</td>
</tr>
<tr>
<td>Electives &amp; Graduation Requirements (to total at least 60)</td>
<td></td>
</tr>
</tbody>
</table>

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.

REQUIREMENTS FOR CERTIFICATE:

CORE COURSES:
- AG 1 Career Planning for Agriculture 2
- AG 6 Career Placement – Ag and Natural Resources 1
- AG 94 Worksite Learning 3
- AGAS 11 Livestock Feeding and Nutrition 3
- AGEQ 12 Horsemanship 3
- AGEQ 13 Horse Husbandry 3
- AGEQ 21 Horse Management 3
- AGEQ 111 Handling Problem Horses 3
- AGMA 44 Intro. to Const. Skills for Ag and Nat. Resources 3
- AGNR 52 Computers in Agriculture/Natural Resources 3
- AGPS 20* Plant Science 4
- AGPS 24 Soils 3
- AGVETT 16 Veterinary Practices 2

43

*May be used to fulfill General Education requirements. See a counselor.

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Major</th>
<th>43</th>
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</thead>
<tbody>
<tr>
<td>General Education</td>
<td>21**</td>
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<tr>
<td>Electives &amp; Graduation Requirements (to total at least 60)</td>
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</tr>
</tbody>
</table>

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.

REQUIREMENTS FOR CERTIFICATE:

CORE COURSES:
- AG 1 Career Planning for Agriculture 2
- AG 6 Career Placement – Ag and Natural Resources 1
- AG 94 Worksite Learning 3
- AGAS 11 Livestock Feeding and Nutrition 3
- AGEQ 12 Horsemanship 3
- AGEQ 13 Horse Husbandry 3
- AGEQ 21 Horse Management 3
- AGEQ 111 Handling Problem Horses 3
- AGMA 44 Intro. to Const. Skills for Ag and Nat. Resources 3

30
Agriculture – Equipment Operations & Maintenance

This curriculum is designed to provide employable skills essential to several occupations and emphasizes the "learning-by-doing" method of instruction on modern up-to-date equipment.

REQUIREMENTS FOR CERTIFICATE:

AGMA 44 Intro. to Const. Skills for Ag and Nat. Resources OR 3
WELD 70 Beginning Welding 3
AGRN 66 Watershed Restoration Practicum 1
AGPS 24 Soils OR 3
DIES 48 Hydraulics 3.5
CONS 45 Career Planning/Leadership for Heavy Equip. Ops. 2
CONS 46 Equipment Operations and Maintenance 3
CONS 47 Project Construction for Equipment Operations 3
CONS 48 Surveying for Equipment Operators 2
CONS 55 Equipment Operations Skills Development OR 1-2
CONS 94 Worksite Learning for Construction Technology 3
MATH 100* Technical Applications of Mathematics 3
*or Math Placement Level 3 or higher
Current CPR/First Aid Certification (Required)

TOTAL UNITS FOR CERTIFICATE 21-22.5

Suggested Courses: CONS 149, AUTO 1, DIES 166, DIES 170, ENGR 118, CMST 54, WELD 170, English, Computers

Agriculture – Forest Science and Technology

The job market in forestry is strong with respect to both permanent and seasonal employment. On average, 70-80% of seasonal Natural Resources job openings in northern California are for forestry technicians. Duties will vary, but generally include timber inventory and marking, harvest plan layout, ecosystem restoration work, and wildlife surveys. Today, this new forestry must focus on the ecosystem as a whole while realizing we still need to provide a myriad of values from our forests. Such values include biodiversity, clean air and water, and recreation in addition to wood products. By properly applying ecological principles to manage our forests, we can enhance biodiversity and lessen the impact of our consumption on forests around the world.

On average, seasonal forestry technicians are paid anywhere from $10-$15 per hour. Permanent jobs for qualified technicians start around $30,000 - $40,000 per year with benefits. Students who complete the A.S. degree in Forest Science and Technology will be well prepared to transfer to a four-year degree at Humboldt State, Cal-Poly San Luis Obispo, or other out-of-state institutions such as the University of Idaho. Students should contact a member of the forestry/natural resources faculty to discuss career options and courses.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE

CORE COURSES:

AG 6 Career Placement – Ag and Natural Resources 1
AGNR 1 Introduction to Natural Resources 3
AGNR 6 Native Plant Identification 3
AGNR 10 Satellite Imagery/Mapping Techniques for NR 4
AGNR 12 Environmental Policy and Law 2
AGNR 50 Natural Resources Measurements 4
AGNR 51 Silviculture and Fire Ecology 2
AGNR 52 Computers in Agriculture/Natural Resources 3
AGNR 53 Forest Protection and Restoration Ecology 3
AGNR 55 Introduction to Forest Operations 3
AGNR 64 Watershed Management and Ecology 3
AGNR 65 Forest Ecology 3
AGNR 66 Watershed Restoration Practicum 1
AGNR 70 Wildlife Management and Conservation 3
AGNR 83 Introduction to Global Positioning Systems (GPS) 1
AGNR 94 Natural Resources Worksite Learning 1

*May be used to fulfill General Education requirements. See a counselor.

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Major</th>
<th>General Education</th>
<th>Electives &amp; Graduation Requirements (to total at least 60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>21**</td>
<td>**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.</td>
</tr>
</tbody>
</table>

**Students may choose one of the following alternatives: ENGL 190 OR a combination of ENGL 191, and two units selected from the following courses: ENGL 192, ENGL 193 or ENGL 194 for a total of 4 units.

TOTAL UNITS FOR CERTIFICATE 46-49

Associate in Science Degree Requirements

41
21**

Agriculture – Horticulture

Also see Agriculture-Environmental Horticulture for Transfer Degree information

The Green Industry is a huge industry with many different career opportunities. Nursery sales exceeded $55 billion nationally. California sells $13.26 billion in nursery and floral products annually and the Landscape Industry continues to grow rapidly as population increases both statewide and locally. The Shasta College Horticulture Program will introduce students to an array of horticulture opportunities and provide them with the necessary skills to begin a career in the horticultural field. Job opportunities continue to outpace the number of graduates in our local area. Career choices range from city and county parks; state and federal organizations; garden centers, independent, local and national chains; landscape maintenance business; floral design and arrange; landscape design and installation and nursery and landscape management positions. Courses include directed practical experience in a modern horticulture facility that includes a floral lab room, 7,000 square feet of greenhouses and 20,000 square feet of landscaped area. Many landscaping operations are also done on the beautiful 300-acre college campus.

Students should contact their counselor or environmental horticulture faculty advisor to choose electives for the particular career they are planning to enter. Particular attention should be paid to course prerequisites.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE

Students who do not qualify for advanced levels of mathematics are strongly encouraged to enroll in MATH 100-Technical Applications of Math as preparation for degree requirements.

CORE COURSES:

AG 1 Career Planning for Agriculture 2
AG 6 Career Placement – Ag and Natural Resources 1
AGEH 22 Nursery Practices and Plant Propagation 2
AGEH 23 Nursery Practices and Management 2
AGEH 26 Integrated Pest Management in Environ. Hort. 3
AGEH 27 Plant Identification and Taxonomy 1
AGEH 28 Plant Identification and Taxonomy 1
AGEH 29 Plant Identification and Taxonomy 1
AGEH 31.1 Landscape Irrigation - Design 1
AGEH 31.2 Landscape Irrigation - Installation 1
AGEH 31.3 Landscape Irrigation – Troubleshoot/Schedule 1
AGEH 33 Environmental Horticulture 3
AGEH 35 Landscape Design 3
AGEH 38 Landscape and Turf Management 3
AGEH 39 Horticulture Worksite Learning 3
AGMA 44 Intro. to Const. Skills for Ag and Natural Resources OR 3
AGRN 52 Computers in Agriculture/Natural Resources 3
AGRN 83 Introduction to Global Positioning Systems (GPS) 1
AGPS 24 Soils 3
CHEM 2A* Introduction to Chemistry 5

*May be used to fulfill General Education requirements. See a counselor.
Agriculture-Horticulture – Master Floral Design Certificate

This curriculum is designed to provide floral design skills for entry-level jobs within the industry and training for advancement not easily available from on-the-job training.

REQUIREMENTS FOR CERTIFICATE:

- AGEH 34 Beginning Floral Design – Fall Flowers 2
- AGEH 36 Floral Design for Weddings/Special Occasion 2
- AGEH 37 Nursery and Florist Management 3
- AGEH 39 Tropical Floral Design 1.5
- AGEH 40 Intermediate Floral Design 2
- AGEH 41 Selection/Care of Blooming and Tropical Plants 1.5
- AGEH 44 Beginning Floral Design – Spring Flowers 2
- AGEH 45 Holiday Decorations and Banquets 1
- AGEH 94 Horticulture Worksite Learning 1-2

TOTAL UNITS FOR CERTIFICATE: 16-17

RECOMMENDED COURSES (not required):

- AG 6 Career Placement – Ag and Natural Resources
- AGEH 23 Nursery Practices & Management
- AGEH 27, 28, 29 Plant Identification and Taxonomy
- AGEH 97 Special Topics in Environmental Horticulture
- BUAD 45 Human Relations on the Job

**Some CORE courses may be double counted to fulfill General Education requirements. See a counselor.**

Agriculture-Horticulture – Irrigation Certificate

The Irrigation Certificate Program provides students with the skills, knowledge and hands-on experience necessary to meet the Irrigation Association standards to apply for the Auditor, Contractor or Designer Exams. Students will develop the basic skills and knowledge about irrigation principles and practices. They will explore and become familiar with the current practices in agriculture, landscape, turf management and residential industries. Students will have access to practical applications and computer training on these topics as well as worksite learning opportunities. Basic soil and plant science, electrical principles and pumping technologies will be covered.

REQUIREMENTS FOR CERTIFICATE:

CORE COURSES:

- AGEH 31 Landscape Irrigation 3
- AGEH 35 Landscape Design 3
- AGPS 24 Soils 3
- AGPS 25 California Water 3

RESTRICTED ELECTIVE COURSES:
In addition, students must complete one of the following:

- AGEH 38 Landscape and Turf Management 3
- AGEH 94 Horticulture Worksite Learning 1-4
- AGPS 20 Plant Science 4
- AGMA 44 Intro. to Const. Skills for Ag. and Natural Resources 3

TOTAL UNITS FOR CERTIFICATE: 13-16

In addition to the core courses, students will need to complete additional hours of work experience in order to take the Contractor or Designers Certification Exam with the Irrigation Association. Shasta College plans on making these opportunities available through Horticulture Worksite Learning (AGEH 94). Those students taking the Certified Irrigation Contractors exam would also need skills in layout, staking, business, management, and codes.

Agriculture-Horticulture – Landscape & Turf Management

Students completing this certificate will be able to plant and maintain landscapes and turf grass for recreational, municipal, commercial and residential use.

REQUIREMENTS FOR CERTIFICATE:

- AGEH 26 Integrated Pest Management in Environ. Hort. 3
- AGEH 31.1 Landscape Irrigation – Design 1
- AGEH 31.2 Landscape Irrigation – Installation 1
- AGEH 31.3 Landscape Irrigation – Troubleshoot/Schedule 1
- AGEH 38 Landscape and Turf Management 3
- AGEH 75 Water Gardening 1
- AGEH 94 Horticulture Worksite Learning 1
- AGMA 44 Intro. to Const. Skills for Ag. and Natural Resources 3
- AGPS 24 Soils 3
- AGPS 46 Equipment Operations and Maintenance 1

TOTAL UNITS FOR CERTIFICATE: 17

Agriculture-Horticulture – Retail Nursery Sales

This curriculum is designed to help prepare the student for the certification exam administered by the California Association of Nurseries and Garden Centers, and entry into the world of Ornamental Horticulture. The requirement of work experience is an important part of this certification. See details on the CANGC.org website.

REQUIREMENTS FOR CERTIFICATE:

- AGEH 23 Nursery Practices & Management 2
- AGEH 26 Integrated Pest Management in Environ. Hort. 3
- AGEH 27 Plant Identification and Taxonomy 1
- AGEH 28 Plant Identification and Taxonomy 1
- AGEH 29 Plant Identification and Taxonomy 1
- AGEH 35 Landscape Design 3
- AGEH 38 Landscape and Turf Management 3
- AGEH 94 Horticulture Worksite Learning 1-3

TOTAL UNITS FOR CERTIFICATE: 15-17

RECOMMENDED COURSES (not required):

- AGA 37 Nursery and Florist Management
- BUAD 45 Human Relations on the Job
- BUAD 106 Business Mathematics
- MKTG 72 Advertising

Agriculture – Natural Resources

This curriculum is designed to provide technician-level training for students interested in working in such areas as wildlife, forestry, range, and outdoor recreation. Typical employers include local, county, and U.S. Government agencies, as well as private companies. Particular attention should be paid to course prerequisites and to whether a class is taught during the fall or spring semester, or both.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE

CORE COURSES:

- AG 6 Career Placement – Ag and Natural Resources 3
- AGDR 1 Introduction to Natural Resources 1
- AGDR 6 Native Plant Identification 3
- AGDR 10 Satellite Imagery/Mapping Tech. for Nat. Res. 4
- AGDR 12 Environmental Policy and Law 2
- AGDN 50 Natural Resource Measurements 4
- AGDR 52 Computers in Agriculture/Natural Resources 3
- AGDR 60 Environmental Science (GE-Natural Science) 3
- AGDR 64 Watershed Management and Ecology 3
- AGDR 65 Forest Ecology 3
- AGDR 66 Watershed Restoration Practicum 1
- AGDR 70 Wildlife Management and Conservation 3
- AGDR 83 Introduction to GPS 1
- AGDR 94 Natural Resources Worksite Learning 1
- AGMA 44 Intro. to Const. Skills for Ag and Natural Resources 3
- AGPS 24 Soils 3

TOTAL UNITS FOR CERTIFICATE: 41

*May be used to fulfill General Education requirements. See a counselor.

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Major</th>
<th>41</th>
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</thead>
<tbody>
<tr>
<td>General Education</td>
<td>21**</td>
</tr>
</tbody>
</table>

Electives & Graduation Requirements (to total at least 60)

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.

REQUIREMENTS FOR CERTIFICATE:

- AGDR 10 Satellite Imagery/Mapping Tech. for Nat. Res. 4
- AGDR 52 Computers in Agriculture/Natural Resources 3
- AGDR 66 Watershed Restoration Practicum 1
- AGDR 70 Wildlife Management and Conservation 3
- AGDR 83 Introduction to GPS 1
- AGDR 94 Natural Resources Worksite Learning 1

TOTAL UNITS FOR CERTIFICATE: 26

**These courses also count towards the Watershed Restoration Certificate.
Agriculture – 
Sustainable Agriculture Science

The Sustainable Agriculture Science Degree at Shasta College provides training for ranching, farming, agriculture production and related careers in vocational education, sales, services and distribution of agriculture-related products. In the core courses, students will receive a broad-based knowledge of agriculture, agronomy management, and both sustainable and traditional agricultural production practices. A hands-on approach provides students with realistic training and education in livestock husbandry, crop production, farm and land management and equipment operations and repair.

Pending Chancellor’s Office Approval

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

CORE COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>AG 1</td>
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<td>AG 6</td>
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<td>AG 9</td>
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OPTION 1 – General Agriculture Science Concentration

(Choose eight units)

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<td>AGAB 54*</td>
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<tr>
<td>AGMA 42</td>
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<tr>
<td>CHEM 2A*</td>
<td>5</td>
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<tr>
<td>CHEM 2B*</td>
<td>5</td>
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<tr>
<td>CONS 46</td>
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</table>

OPTION 2 – Agriculture Education Concentration

(Choose nine units)

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<td>AGEH 22</td>
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<td>AGEH 26</td>
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<td>AGEQ 13</td>
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<td>AGMA 42</td>
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<tr>
<td>CONS 46</td>
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<tr>
<td>WELD 73</td>
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</table>

OPTION 3 – Farm, Ranch, and Wildland Management Concentration

(Choose a total of nine units with at least one course from each area)

(Area 1) Wildland Management Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
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<td>AGNR 12</td>
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<td>AGNR 64</td>
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<td>AGNR 65</td>
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<td>AGNR 70</td>
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(Area 2) Farm and Ranch Management Curriculum

<table>
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<tr>
<td>AGEH 26</td>
<td>3</td>
</tr>
<tr>
<td>AGEH 31</td>
<td>3</td>
</tr>
<tr>
<td>AGPS 25*</td>
<td>3</td>
</tr>
<tr>
<td>AGHE 33*</td>
<td>3</td>
</tr>
<tr>
<td>AGEQ 21</td>
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<tr>
<td>AGMA 42</td>
<td>3</td>
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<tr>
<td>AGVIT 80</td>
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<tr>
<td>AGVIT 81</td>
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</tr>
<tr>
<td>WELD 73</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional General Education Required for A.S. Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1A*</td>
<td>4</td>
</tr>
<tr>
<td>CMST 60</td>
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<tr>
<td>CMST 54</td>
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</tr>
<tr>
<td>MATH 102*</td>
<td>5</td>
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<tr>
<td>MATH 13*</td>
<td>OR</td>
</tr>
<tr>
<td>MATH 14*</td>
<td>3</td>
</tr>
<tr>
<td>AGNR 52</td>
<td>3</td>
</tr>
<tr>
<td>Humanities or Category C for CSU transfer</td>
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</tr>
<tr>
<td>Multicultural or Living Skills course that meets Living Skills requirement and Category E for CSU</td>
<td>3</td>
</tr>
</tbody>
</table>

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.

1. Students planning to transfer to a college or university should consult a counselor or Agriculture faculty regarding transfer requirements. TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM A.S. DEGREE REQUIREMENTS.
2. Sixty (60) units are required for the AS Degree. All graduation requirements are met.

Agriculture-Veterinary Technician

The main program goal is to provide hands-on training to students interested in becoming Registered Veterinary Technicians (RVT). They will also receive the practical field experience working under a licensed veterinarian that is required in order to take the RVT exam. They will gain competencies in the following areas: a) veterinary anatomy, physiology, and medical terminology; b) veterinary practices; c) fundamentals of animal health technology; d) health and diseases of animals; e) veterinary radiology and imaging; f) veterinary anesthesiology, surgical assisting and dentistry; and g) care of exotic and laboratory animals.

One of the advantages of having the new degree program is that students will be required to get work experience with a licensed veterinarian while taking classes, and should be able to complete the majority of required hours by the time they graduate. For more information or additional requirements, or for students pursuing the alternate route, they should obtain the Alternate Route Workbook from the California Veterinary Medical Association.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

CORE COURSES:

<table>
<thead>
<tr>
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</tr>
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<tbody>
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<td>AG 94</td>
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<td>AG 58</td>
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<td>AGAB 53</td>
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<td>AGAS 11</td>
<td>3</td>
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<td>AGAS 19*</td>
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<td>AGPS 24*</td>
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<td>AGSA 66</td>
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OPTION 1 – General Agriculture Science Concentration

(Choose eight units)

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<tbody>
<tr>
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<td>AGAB 54*</td>
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<tr>
<td>AGMA 42</td>
<td>3</td>
</tr>
<tr>
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<td>5</td>
</tr>
<tr>
<td>CHEM 2B*</td>
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<tr>
<td>CONS 46</td>
<td>3</td>
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</table>

OPTION 2 – Agriculture Education Concentration

(Choose nine units)

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<tr>
<td>CONS 46</td>
<td>3</td>
</tr>
<tr>
<td>WELD 73</td>
<td>3</td>
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</tbody>
</table>

OPTION 3 – Farm, Ranch, and Wildland Management Concentration

(Choose a total of nine units with at least one course from each area)

(Area 1) Wildland Management Curriculum

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
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<td>AGNR 65</td>
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<tr>
<td>AGNR 70</td>
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(Area 2) Farm and Ranch Management Curriculum

<table>
<thead>
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<th>Course</th>
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<tbody>
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<td>AGAB 51</td>
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<td>AGEH 26</td>
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<td>AGVIT 80</td>
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<td>AGVIT 81</td>
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<tr>
<td>WELD 73</td>
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</tr>
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</table>

Additional General Education Required for A.S. Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1A*</td>
<td>4</td>
</tr>
<tr>
<td>CMST 60</td>
<td>3</td>
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<tr>
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<td>AGNR 52</td>
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</tr>
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</table>

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.

1. Students planning to transfer to a college or university should consult a counselor or Agriculture faculty regarding transfer requirements. TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM A.S. DEGREE REQUIREMENTS.
2. Sixty (60) units are required for the AS Degree. All graduation requirements are met.

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
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<tbody>
<tr>
<td>Core Courses</td>
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<tr>
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</tr>
<tr>
<td>Electives &amp; Graduation Requirements (to total at least 60)</td>
<td></td>
</tr>
</tbody>
</table>

*May be used to fulfill General Education requirements. See a counselor.

Art

This curriculum qualifies the student for the AA degree with a concentration in the Visual Arts. Transfer Art students should check course requirements with their counselor or their transfer college.

REQUIREMENTS FOR ASSOCIATE IN ARTS DEGREE:

Students must complete the "CORE" courses and select nine (9) units from the "ELECTIVE" courses listed below for their major. In addition, students must fulfill the 33-39 unit general education pattern for CSU or IGETC.

CORE COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>ART 2</td>
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<tr>
<td>ART 3</td>
<td>3</td>
</tr>
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<td>ART 12</td>
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<td>ART 13</td>
<td>3</td>
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<td>ART 21A</td>
<td>3</td>
</tr>
<tr>
<td>ART 21B</td>
<td>3</td>
</tr>
</tbody>
</table>

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
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<tbody>
<tr>
<td>Core Courses</td>
<td></td>
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<tr>
<td>General Education</td>
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</tr>
<tr>
<td>Electives &amp; Graduation Requirements (to total at least 60)</td>
<td></td>
</tr>
</tbody>
</table>

*May be used to fulfill General Education requirements. See a counselor.
Automotive Technology Program (continued):

**REQUIREMENTS FOR CERTIFICATE:**
The objective is to allow the student to gain entry level skills specific to the automotive industry.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 1</td>
<td>Vehicle Electrical Systems</td>
<td>3</td>
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<tr>
<td>AUTO 10</td>
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<tr>
<td>AUTO 20</td>
<td>Engine Performance</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 21</td>
<td>Advanced Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 94</td>
<td>Worksite Learning for Automotive Technology</td>
<td>2</td>
</tr>
<tr>
<td>INDE 150</td>
<td>Introduction to Engine Machining</td>
<td>3</td>
</tr>
<tr>
<td>INDE 152</td>
<td>Engine Machining Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>INDE 151</td>
<td>Engine Machinist I</td>
<td>4</td>
</tr>
<tr>
<td>INDE 181</td>
<td>Engine Machinist II</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:**

16

Automotive Machine Certificate

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 94</td>
<td>Worksite Learning for Automotive Technology</td>
<td>2</td>
</tr>
<tr>
<td>INDE 150</td>
<td>Introduction to Engine Machining</td>
<td>3</td>
</tr>
<tr>
<td>INDE 152</td>
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<td>3</td>
</tr>
<tr>
<td>INDE 151</td>
<td>Engine Machinist I</td>
<td>4</td>
</tr>
<tr>
<td>INDE 181</td>
<td>Engine Machinist II</td>
<td>4</td>
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</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:**

16

Automotive Electrical-Electronics

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 1</td>
<td>Vehicle Electrical Systems</td>
<td>3</td>
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<tr>
<td>AUTO 10</td>
<td>Automotive Electronics</td>
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<tr>
<td>AUTO 20</td>
<td>Engine Performance</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 21</td>
<td>Advanced Engine Performance</td>
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</table>

**TOTAL UNITS FOR CERTIFICATE:**

6

Automotive Chassis Certificate

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AUTO 150</td>
<td>Introduction to Engine Machining</td>
<td>3</td>
</tr>
<tr>
<td>INDE 152</td>
<td>Engine Machining Laboratory</td>
<td>3</td>
</tr>
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</table>

**TOTAL UNITS FOR CERTIFICATE:**

6

Automotive Engine Performance

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 1</td>
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</tr>
<tr>
<td>AUTO 21</td>
<td>Advanced Engine Performance</td>
<td>3</td>
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</table>

**TOTAL UNITS FOR CERTIFICATE:**

13

Automotive Heat & Air Conditioning Certificate

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDE 150</td>
<td>Introduction to Engine Machining</td>
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<td>INDE 152</td>
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**TOTAL UNITS FOR CERTIFICATE:**

6

Automotive Powertrain Certificate

**REQUIREMENTS FOR CERTIFICATE:**

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<th>Course Code</th>
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<tbody>
<tr>
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<tr>
<td>AUTO 21</td>
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</table>

**TOTAL UNITS FOR CERTIFICATE:**

9

Associate in Science Degree Requirements

**MAY BE USED TO FULFILL GENERAL EDUCATION REQUIREMENTS. SEE A COUNSELOR.**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>INDE 151</td>
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<td>INDE 181</td>
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</table>

**TOTAL UNITS FOR CERTIFICATE:**

40

Associate in Arts Degree Requirements

**MAY BE USED TO FULFILL GENERAL EDUCATION REQUIREMENTS. SEE A COUNSELOR.**

**ELECTIVE COURSES:**

Choose nine (9) units from the courses listed below in 2-D or 3-D areas

<table>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
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<tr>
<td>INDE 181</td>
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**TOTAL UNITS FOR CERTIFICATE:**

47

- **Art A.A. Degree (continued):**

- **AUTOMOTIVE TECHNOLOGY – AUTOMOTIVE CHASSIS CERTIFICATE:**

**REQUIREMENTS FOR CERTIFICATE:**

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**TOTAL UNITS FOR CERTIFICATE:**

11

- **AUTOMOTIVE TECHNOLOGY – AUTOMOTIVE ELECTRICAL-ELECTRONICS:**

**REQUIREMENTS FOR CERTIFICATE:**

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<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
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</table>

**TOTAL UNITS FOR CERTIFICATE:**

6

- **AUTOMOTIVE TECHNOLOGY – AUTOMOTIVE ENGINE PERFORMANCE:**

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
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</thead>
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<tr>
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<tr>
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<td>Advanced Engine Performance</td>
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</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:**

13

- **AUTOMOTIVE TECHNOLOGY – AUTOMOTIVE HEAT & AIR CONDITIONING CERTIFICATE:**

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
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<th>Course Code</th>
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<th>Units</th>
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<tbody>
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**TOTAL UNITS FOR CERTIFICATE:**

6

- **AUTOMOTIVE TECHNOLOGY – AUTOMOTIVE POWERTRAIN CERTIFICATE:**

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>AUTO 1</td>
<td>Vehicle Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 10</td>
<td>Automotive Electronics</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 20</td>
<td>Engine Performance</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 21</td>
<td>Advanced Engine Performance</td>
<td>3</td>
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</table>

**TOTAL UNITS FOR CERTIFICATE:**

9

- **AUTOMOTIVE TECHNOLOGY – AUTOMOTIVE POWERTRAIN CERTIFICATE:**

**REQUIREMENTS FOR CERTIFICATE:**

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<tr>
<td>AUTO 150</td>
<td>Introduction to Engine Machining</td>
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<td>INDE 152</td>
<td>Engine Machining Laboratory</td>
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**TOTAL UNITS FOR CERTIFICATE:**

6

- **AUTOMOTIVE TECHNOLOGY – AUTO TRANSMISSIONS AND TRANSAXLES:**

**REQUIREMENTS FOR CERTIFICATE:**

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</tr>
<tr>
<td>AUTO 21</td>
<td>Advanced Engine Performance</td>
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**TOTAL UNITS FOR CERTIFICATE:**

9

- **AUTOMOTIVE TECHNOLOGY – AUTO TRANSMISSIONS AND TRANSAXLES:**

**REQUIREMENTS FOR CERTIFICATE:**

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<tr>
<td>AUTO 21</td>
<td>Advanced Engine Performance</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:**

7

**REQUIREMENTS FOR CERTIFICATE:**

**General Education:**

21

**Electives & Graduation Requirements (to total at least 60)**

**Associate in Arts Degree Requirements:**

27

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.**
**Business Administration**

**Business Administration - Accounting Concentration**

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

**CORE COURSES:**
- ACCT 101 Basic Accounting I OR 3
- ACCT 102 Basic Accounting II 3
- ACCT 103 PC Accounting 2
- ACCT 104 Payroll Accounting 2
- ACCT 194 Income Tax 3
- BUAD 6 Business Law 3
- BUAD 10* Introduction to Business 3
- BUAD 15 Business and Society 3
- BUAD 45* Human Relations on the Job 3
- BUAD 66* Business Communications 3
- CIS 1 Computer Literacy Workshop 3
- CIS 20 Access for Windows I OR 1
- OAS 51 Keyboarding I-Beginning Typing 3
- OAS 64 Computerized Ten-Key 0.5

**Electives & Graduation Requirements (to total at least 60)**

- General Education 21**
- Major 36.5
- Restricted Elective Courses 27

*May be used to fulfill General Education requirements. See a counselor.

**Associate in Science Degree Requirements**

<table>
<thead>
<tr>
<th>Major</th>
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</tr>
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<tbody>
<tr>
<td>36.5</td>
<td>21**</td>
</tr>
</tbody>
</table>

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.

**Business Administration – Entrepreneurship Certificate**

*Students considering this certificate should contact the Division Office at 530-242-7754 for pertinent information prior to registering for classes.*

**REQUIREMENTS FOR CERTIFICATE:**
- ACCT 101 Basic Accounting I 3
- BUAD 10 Introduction to Business 3
- BUAD 40 Entrepreneurship and Small Business Operations 3
- BUAD 42 Financing a Small Business 3
- BUAD 76 Sales 3
- BUAD 82 Managing Organization Change .5
- BUAD 85 Customer Service in the Workplace .5
- BUAD 86 Decision Making and Problem Solving .5
- BUAD 90 Values and Ethics .5

**TOTAL UNITS FOR CERTIFICATE** 17

**Business Administration – General Business Concentration**

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

**CORE COURSES:**
- ACCT 101 Basic Accounting I OR 3
- ACCT 2 Introduction to Financial Accounting 3
- BUAD 6 Business Law 3
- BUAD 10* Introduction to Business 3
- BUAD 15 Business and Society 3
- BUAD 45* Human Relations on the Job 3
- BUAD 66* Business Communications 3
- BUAD 91 Principles of Management OR 3
- CIS 4 Business Data Communications 3
- CIS 1 Computer Literacy Workshop 3
- REAL 30 Real Estate Principles 3

**REstricted Elective Courses:**
- Choose one (1) unit from the following
  - ACCT 2 Introduction to Financial Accounting 3
  - ACCT 102 Basic Accounting II 3
  - BUAD 8 Business Law 3
  - BUAD 41 Supervision and Leadership 3
  - BUAD 46 Fundamentals of Nonprofit Management 1

**TOTAL UNITS FOR DEGREE** 40

**Business Administration – Management Concentration**

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

**CORE COURSES:**
- ACCT 101 Basic Accounting I OR 3
- ACCT 2 Introduction to Financial Accounting 3
- BUAD 6 Business Law 3
- BUAD 8 Business Law 3
- BUAD 10* Introduction to Business 3
- BUAD 15 Business and Society 3
- BUAD 41 Supervision and Leadership 3
- BUAD 45* Human Relations on the Job 3
- BUAD 66* Business Communications 3
- BUAD 71 Intro to e-Commerce OR 1
- BUAD 72 e-Commerce Marketing 1
- BUAD 76 Sales 3
- BUAD 77 Principles of Marketing 3
- OAS 51 Keyboarding I-Beginning Typing 3

**Electives & Graduation Requirements (to total at least 60)**

- General Education 21**
- Major 36.5

*May be used to fulfill General Education requirements. See a counselor.

**Communication Studies**

**REQUIREMENTS FOR ASSOCIATE IN ARTS DEGREE:**

Students must complete the "CORE" courses listed below for their major. In addition, students must fulfill the 33-39 unit general education pattern for CSU or IGETC.

**CORE COURSES:**
- CMST 10 Interpersonal Communication 3
- CMST 20 Intercultural Communication 3
- CMST 30 Oral Interpretation 3
- CMST 40 Argumentation and Debate 3
- CMST 54 Small Group Communication 3
- CMST 60 Public Speaking 3
- COM 21 Multi-Media Authoring OR 3
- HUM 4 Humanities through the Film 3
- HUM 70 Exploring Contemporary Television 3

**Electives & Graduation Requirements (to total at least 60)**

- General Education 21**
Continued
For a complete description of those requirements, please refer to the "Associate in Science" section of this catalog.

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.**

**REQUIREMENTS FOR CERTIFICATE:**

Students who have already completed the CCNA certification or who have successfully completed the Cisco Network Academy CCNA courses may substitute the CCNP course work for the CCNA course work in this certificate program. This would consist of taking the CIS 35 through CIS 38 series rather than the CIS 31 through CIS 34 series of classes. The courses are listed as follows:

- CIS 2: Introduction to Computer Science
- CIS 31: Cisco CCNA 1
- CIS 32: Cisco CCNA 2
- CIS 33: Cisco CCNA 3
- CIS 34: Cisco CCNA 4
- CIS 50: Windows Vista – Configuration
- CIS 51: Support/TS Application on Vista Client
- CIS 52: Server 2008 Active Directory Configuring
- CIS 53: Server 2008 Network Infrastructure
- CIS 54: Server 2008 Server Administrator
- CIS 55: Exchange Server 2007, Configuring
- CIS 56: Designing Security f/Windows Server 2003 Network
- CIS 86: HTML
- CIS 92: Introduction to Computer Security – Security +
- CIS 94: Computer Information Systems Worksite Learning

**TOTAL UNITS FOR CERTIFICATE: 31-32**

**Computer and Info. Systems - Computer Networking Concentration - CCNA Option**

Prior to enrollment in the first semester of the CCNP Option (A.S. Degree or Certificate), students must have completed CIS 34 with a grade of "C" or higher, current CCNA certification, or the equivalent as determined by the multiple measures process.

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

Students must complete the "CORE" courses listed below in addition to 21 units of general education for the Associate in Science degree requirements. For a complete description of those requirements, please refer to the "Associate in Science" section of this catalog.

**CORE COURSES:**

- **BUAD 45**: Human Relations on the Job 3
- **CIS 2**: Introduction to Computer Science 4
- **CIS 31**: Cisco CCNA 1 3
- **CIS 32**: Cisco CCNA 2 3
- **CIS 33**: Cisco CCNA 3 3
- **CIS 34**: Cisco CCNA 4 3
- **CIS 50**: Windows Vista – Configuration 1
- **CIS 51**: Support/TS Application on Vista Client 1
- **CIS 52**: Server 2008 Active Directory Configuring 1
- **CIS 53**: Server 2008 Network Infrastructure 1
- **CIS 54**: Server 2008 Server Administrator 1
- **CIS 55**: Exchange Server 2007, Configuring 1
- **CIS 56**: Designing Security f/Windows Server 2003 Network 1

**RESTRICTED ELECTIVE COURSES:** (Choose eight (8) units)

- **BUAD 10**: Introduction to Business (fulfills G.E. requirement) 3
- **CIS 23**: Concepts of Database Management 3
- **CIS 39**: Cisco Networking – CCNA Security 3
- **CIS 60**: Visual Basic Programming OR 3
- **CIS 61**: C++ Language Programming OR 3
- **CIS 62**: Java Programming OR 3
- **CIS 63**: Assembler Language Programming OR 4
- **CIS 84**: Web Programming Using JAVA/PHP/FLASH 3
- **CIS 72**: Fundamentals of Unix 3
- **CIS 79**: Adv. Web Design Using Dreamweaver & Adobe 2
- **CIS 86**: HTML 3
- **CIS 92**: Computer Science Elective 2
- **CIS 94**: Introduction to Computer Security – Security +
- **CIS 99**: Computer Information Systems Worksite Learning 1

**TOTAL UNITS FOR CERTIFICATE: 34-35**

**Associate in Science Degree Requirements**

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<tr>
<th>Major</th>
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<th>42-43</th>
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<tbody>
<tr>
<td>Electives &amp; Graduation Requirements (to total at least 60)</td>
<td>21**</td>
<td></td>
</tr>
</tbody>
</table>

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.**

**REQUIREMENTS FOR CERTIFICATE:**

- **CIS 2**: Introduction to Computer Science 4
- **CIS 31**: Cisco CCNP 1 3
- **CIS 36**: Cisco CCNP 2 3
- **CIS 37**: Cisco CCNP 3 3
- **CIS 38**: Cisco CCNP 4 3
- **CIS 50**: Windows Vista – Configuration 1
- **CIS 51**: Support/TS Application on Vista Client 1
- **CIS 52**: Server 2008 Active Directory Configuring 1
- **CIS 53**: Server 2008 Network Infrastructure 1
- **CIS 54**: Server 2008 Server Administrator 1
- **CIS 55**: Exchange Server 2007, Configuring 1
- **CIS 56**: Design. Sec. for Windows Server 2003 Network 1
- **CIS 81**: Web Design (Expression Web) OR 1
- **CIS 83**: Web Design Using Dreamweaver 2
- **ELEC 138**: Fundamentals of Electronics 3

**TOTAL UNITS FOR CERTIFICATE: 31-32**
**Students may choose one of the following alternatives: ENGL 190 OR a**

**REQUIREMENTS FOR CONSTRUCTION TECHNOLOGY CERTIFICATE**

- Please check with your counselor to see if courses are double counted.
- Some CORE courses may be double counted to fulfill General Education requirements.

**Electives & Graduation Requirements (to total at least 60)**

- **Major**
  - 46 TOTAL UNITS FOR CERTIFICATE

**Construction Technology**

The curriculum prepares students for entry-level employment in the carpentry trade. Award of specific apprenticeship credit will depend on the employer, local union regulations, attitude of student as well as curriculum completed. Under normal circumstances, credit for partial fulfillment of apprenticeship requirements can be attained.

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

- **CORE COURSES:**
  - 14 TOTAL UNITS FOR CERTIFICATE

**Computer Maintenance**

The Computer Maintenance Certificate Program provides the exposure and training necessary to maintain and troubleshoot common microcomputer systems to the board level. This program provides hands-on training in basic electronics, DOS installation and operation, PC repair and computer management.

**REQUIREMENTS FOR CERTIFICATE:**

- 16 TOTAL UNITS FOR CERTIFICATE

**Computer and Info. Systems–Web Design**

This program is designed to be an introduction to the basics of designing and building simple Web pages. The curriculum assists students, small business owners, office and IT workers, and hobbyists to design and maintain a presence on the Web.

**REQUIREMENTS FOR CERTIFICATE:**

- 46 TOTAL UNITS FOR CERTIFICATE

**Customer Service Academy Certificate**

The Customer Service Academy Certificate will be awarded after all of the following courses have been completed:

**REQUIREMENTS FOR CERTIFICATE:**

- 5 TOTAL UNITS FOR CERTIFICATE

**Dental Hygiene**

The Dental Hygiene Program is designed to train students to work as dental hygienists who have specific knowledge of the dental hygiene profession, a sophisticated level of thinking ability, and the positive character traits (i.e., responsibility, discipline, and initiative) necessary to succeed at any level in the workplace.

All courses in the program will employ an integrated teaching strategy that will include development of critical skills, competence in oral and written English communication, and competence in applied math for problem solving. In addition, all courses will provide a broad understanding of “all aspects of the field (industry).” The program will be articulated with various transfer institutions so that those students who choose to transfer for further study may do so.

**REQUIREMENTS FOR ENROLLMENT INTO THE PROGRAM:**

Space in the program is limited. A new class is enrolled every fall semester. In order to be eligible for enrollment, students must file an enrollment packet with the Admissions office during a designated enrollment period. All qualified applicants are offered enrollment on a space available basis in the order of their application ranking. For specific information see the program web page www.shastacollege.edu/hsup or call the Division Office 530-339-3600.

Students must meet all the following requirements for application:

1. Students must have a high school diploma or its equivalent.
2. Completion of prerequisite course requirements. Prerequisites must be completed upon application. No in-progress courses will be accepted.

**GRADUATION REQUIREMENTS:**

Students must graduate from the Dental Hygiene Program to be eligible to take the state licensing examination. Due to the time commitments of the program, it is strongly recommended that students complete the following additional requirements for graduation before beginning dental hygiene courses:

- Completion of the Humanities requirement
- Completion of competence in mathematics. MATH 102 Intermediate Algebra or MATH 110 Essential Math are the advised courses for meeting this requirement.
- Completion of the multi-cultural awareness requirement
- Completion of computer literacy

**HEALTH & SAFETY CLINICAL CLEARANCE:**

Upon acceptance for enrollment from the wait list into the program, students must meet additional clinical requirements. All students participating in clinical experiences must submit proof of immunity of specific immunizations or serum titers, cleared criminal background check, negative drug screen, current physical examination and negative TB screening, and provide current valid Basic Life Support-Health Care Provider card (CPR) for health professional (includes adult, child & infant resuscitation with two person rescue). Students are financially responsible for meeting these requirements according to established program process.

See division/program web page at http://www.shastacollege.edu/hsup or call Division Office 530-339-3600 for specific requirements, procedures, and deadlines.

**PREREQUISITE COURSES:**

- ANAT 1T Anatomy 5
- PHY 1T Physiology (with Lab) 5
- MICR 1T Microbiology 5
- ENGL 1A College Composition 4
- ENGR 190 Reading and Writing II (see below for alternative) 4
- ENGR 199 Blueprint and Specification Reading (Architectural) 2
- INDE 1 Career Planning for Industrial Technology 1
- MATH 100 Technical Applications of Mathematics 3
- WELD 70 Beginning Welding 3
- 3 TOTAL PREREQUISITE UNITS

**Associate in Science Degree Requirements**

<table>
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<tr>
<th>Major</th>
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<tbody>
<tr>
<td>Electives &amp; Graduation Requirements (to total at least 60)</td>
<td>21**</td>
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</table>

**Core Requirements for Dental Hygiene**

- 46 TOTAL UNITS FOR CERTIFICATE

**Medical Assisting**

The Medical Assisting Program provides students with the skills necessary to assist health professionals in the clinical and administrative areas. The program also provides the foundation for transfer to health sciences programs at the university level.

**REQUIREMENTS FOR CERTIFICATE:**

- 5 TOTAL UNITS FOR CERTIFICATE

**PA (Primary Care)**

The PA Program prepares students to serve as primary care providers for medical routines. The program is designed to prepare students for admission to medical schools and PA programs.

**REQUIREMENTS FOR CERTIFICATE:**

- 5 TOTAL UNITS FOR CERTIFICATE

**Pharmacy Technician**

This program is designed to train students to work in the pharmacy technician field and is a transfer program. The program provides a solid foundation for students to transfer to a four-year institution as a junior.

**REQUIREMENTS FOR CERTIFICATE:**

- 5 TOTAL UNITS FOR CERTIFICATE

**Phlebotomy**

The Phlebotomy Program prepares students to work as phlebotomists and to transfer to a four-year institution. The program provides a solid foundation for students to transfer to a four-year institution as a junior.

**REQUIREMENTS FOR CERTIFICATE:**

- 5 TOTAL UNITS FOR CERTIFICATE

**Radiography**

The program is designed to prepare students for entry-level radiographic positions in hospitals and other medical facilities.

**REQUIREMENTS FOR CERTIFICATE:**

- 5 TOTAL UNITS FOR CERTIFICATE

**Recreation Therapy**

The program is designed to prepare students for entry-level positions in the field of physical therapy. The program provides a solid foundation for students to transfer to a four-year institution as a junior.

**REQUIREMENTS FOR CERTIFICATE:**

- 5 TOTAL UNITS FOR CERTIFICATE

**Respiratory Care**

The program is designed to prepare students for entry-level positions in the field of respiratory therapy. The program provides a solid foundation for students to transfer to a four-year institution as a junior.

**REQUIREMENTS FOR CERTIFICATE:**

- 5 TOTAL UNITS FOR CERTIFICATE

**Secretarial Science**

The program is designed to prepare students for entry-level positions in the field of secretarial science. The program provides a solid foundation for students to transfer to a four-year institution as a junior.

**REQUIREMENTS FOR CERTIFICATE:**

- 5 TOTAL UNITS FOR CERTIFICATE

**Speech Language Pathology**

The program is designed to prepare students for the entry-level positions in the field of speech language pathology. The program provides a solid foundation for students to transfer to a four-year institution as a junior.

**REQUIREMENTS FOR CERTIFICATE:**

- 5 TOTAL UNITS FOR CERTIFICATE

**Sonography**

The program is designed to prepare students for entry-level positions in the field of sonography. The program provides a solid foundation for students to transfer to a four-year institution as a junior.

**REQUIREMENTS FOR CERTIFICATE:**

- 5 TOTAL UNITS FOR CERTIFICATE

**Cosmetology**

The Cosmetology Program prepares students to work as cosmetologists and to transfer to a four-year institution. The program provides a solid foundation for students to transfer to a four-year institution as a junior.

**REQUIREMENTS FOR CERTIFICATE:**

- 5 TOTAL UNITS FOR CERTIFICATE

**Continued on next page**
Dental Hygiene Program (continued):

Final selection of qualified applicants is competitive. Please contact the Health Sciences and University Division for information regarding the selection criteria used to evaluate qualified applicants.

**CORE COURSES**:

- **DNTL 10**: Oral Biology 3
- **DNTL 11**: Oral Radiology 3
- **DNTL 12**: Head and Neck Anatomy 2
- **DNTL 13**: Dental Health Education/Seminar 2
- **DNTL 14**: Introduction to Clinic 4
- **DNTL 20**: Local Anesthesia and Nitrous Oxide 2
- **DNTL 21**: General and Oral Pathology 4
- **DNTL 23**: Patient Management and Geriatrics 2
- **DNTL 24**: Clinical Practice I 4
- **DNTL 25**: Clinic I Seminar 2
- **DNTL 26**: Nutrition in Dentistry 1
- **DNTL 30**: Periodontology I 3
- **DNTL 31**: Pharmacology 2
- **DNTL 32**: Dental Materials 2
- **DNTL 33**: Advanced Clinical Topics 2
- **DNTL 34**: Clinical Practice II 4
- **DNTL 35**: Clinic II Seminar 1
- **DNTL 40**: Periodontology II 1
- **DNTL 41**: Practice and Financial Management 1
- **DNTL 42**: Clinic III Seminar 2
- **DNTL 43**: Clinical Practice III 4
- **DNTL 44**: Community Oral Health 3
- **DNTL 45**: Ethics and Jurisprudence 2

**TOTAL UNITS FOR MAJOR:** 56

*May be used to fulfill General Education requirements. See a counselor.

**DIESEL TECHNOLOGY**

This curriculum prepares the student for entry into the mechanic trade related to heavy equipment and diesel engines. Award of apprenticeship credit for completion of the program will depend on the employer, local union regulations, aptitude of student, as well as the curriculum completed. The Diesel Technology major requires technical courses to satisfy the minimum requirements for the major. Students are encouraged to take as many technical courses and related electives as their program will permit. When necessary, auto mechanic courses and diesel courses may be interchanged to satisfy major requirements.

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE**:

- **DIES 48**: Hydraulics 3.5
- **DIES 49**: Advanced Hydraulics 3
- **DIES 94**: Worksite Learning For Diesel Technology 1-4
- **DIES 160**: Diesel Engine Electronic Control 4
- **DIES 161**: Diesel Technology Field Training 2
- **DIES 162**: Heavy Duty Power Train 4
- **DIES 164**: Diesel Performance Analysis 4
- **DIES 166**: Diesel Engines 6
- **DIES 170**: Heavy Duty Braking Systems 4
- **ENGL 1A**: College Composition 4
- **INDE 1**: Career Planning for Industrial Tech. 1
- **MATH 110**: Essential Math 3
- **WELD**: Any Advanced Welding Class 3
- **WELD 70**: Beginning Welding 3

**TOTAL UNITS FOR CERTIFICATE** 45.5-48.5

**Students may choose one of the following alternatives: ENGL 191 OR a combination of ENGL 191, and two units selected from the following courses:**

- ENGL 192, ENGL 193 OR ENGL 194 for a total of 4 units.

* = Check Prerequisites

**DIETARY SERVICE SUPERVISOR CERTIFICATE**

The Dietary Service Supervisor program is designed to prepare students to work in a supervisory role in the food and nutrition services area of the healthcare industry. Graduates of the Shasta College DSS program can lawfully use the title of Dietetic Service Supervisor, as described in CA State Law, Title 22.

**REQUIREMENTS FOR CERTIFICATE**:

- **CULA 50**: Sanitation and Safety 2
- **DSS 10**: Food Production Management 3
- **DSS 63**: DSS Operations and Management 3
- **DSS 94**: DSS Certificate Worksite Learning 3
- **FSS 25**: Nutrition 3
- **FSS 27**: Nutrition and Disease 2

**TOTAL UNITS FOR CERTIFICATE** 16

**Early Childhood Education**

The Early Childhood Education Program prepares students to become teachers and directors in programs providing care and learning opportunities for young children. The college courses focus on training for careers in preschools, Head Start, childcare, infant-toddler and school age care, and family childcare. Programs for young children require different qualifications for teachers and child care providers. The A.S. Degree in Early Childhood Education at Shasta College meets course work qualifications for the Child Development Teacher Permit Level and Title 22 staff qualifications for a teacher and director. Additional specified experience with children is required.

The Shasta College Early Childhood Education Program is participating in a statewide Curriculum Alignment Project between California Community Colleges and participating CSU and UC systems. A twenty-four unit core of eight specific Early Childhood Education courses will articulate with participating four year degree programs in Child Development and Early Childhood Education.

There are a minimum of 44 units in the major required for the Associate Science Degree in Early Childhood Education. Students need to complete core-required courses (38 units) and an additional 6 units of restricted elective courses. Twenty-one (21) General Education units will complete the Associate of Science degree in Early Childhood Education. All courses applied to the ECE A.S. Degree must be completed with a "C" grade or better.

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE**:

- **ECE 1**: Human Development OR
- **ECE 9**: Child Growth and Development (ECE 9 is recommended for students planning to transfer to a 4 year program for a degree in Early Childhood Education or Child Development) 3
- **ECE 2**: Child, Family, Community 3
- **ECE 3**: Early Childhood Program Administration 3
- **ECE 7**: Early Childhood Observation & Assessment 3
- **ECE 8**: Teaching Practicum for Young Children 5
- **ECE 15**: Child Health, Safety and Nutrition 3
- **ECE 17**: Principles/Practices of Teaching Young Children 3
- **ECE 20**: Introduction to Curriculum 3
- **ECE 28**: Teaching in a Diverse Society 3
- **ECE 30**: E.C. Curriculum: Physical Development 3
- **ECE 50**: E.C. Curriculum: Cognitive Development 3
- **ECE 52**: Guidance in Adult-Child Relations 3
Early Childhood Education Program (continued):

**REQUIREMENTS FOR CERTIFICATE**

Students completing the 17-unit Early Childhood Education Certificate will be prepared to seek a family childcare provider position or family childcare licensure (assuming ability to pass Community Care Licensing [Social Services Dept.] requirements related to physical site).

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE**

Students must complete the following courses to complete the Associate in Science degree in 60 units or less: 44 units of General Education requirements and 5 general elective units. For a complete description of those requirements, please refer to the “Associate in Science” section of this catalog.

**Associate in Science Degree Requirements**

- **Major**: 21 units
- **General Education**: 44 units
- **Electives & Graduation Requirements (to total at least 60)**

**Engineering Technology**

- **Elective Courses**: Choose five (5) units from the following:
  - ENGR 1A: Measurements and Plane Surveying
  - ENGR 1B: Plane Surveying
  - ENGR 2A: Engineering Graphics
  - ENGR 4: Descriptive Geometry
  - ENGR 27: Teaching Children with Special Needs
  - ENGR 30: Computer-Aided Drafting (CAD)
  - ENGR 31: Statics for Engr. Tech. and Construction Management
  - MATH 10*: Plane Trigonometry
  - MATH 102*: Intermediate Algebra
  - ENGR 17: Principles/Practices of Teaching Young Children
  - ENGR 20: Introduction to Curriculum
  - ENGR 24: Descriptive Geometry
  - MATH 10*: Plane Trigonometry
  - MATH 102*: Intermediate Algebra
  - ENGR 17: Principles/Practices of Teaching Young Children
  - ENGR 20: Introduction to Curriculum
  - ENGR 24: Descriptive Geometry
  - MATH 10*: Plane Trigonometry
  - MATH 102*: Intermediate Algebra
  - ENGR 17: Principles/Practices of Teaching Young Children
  - ENGR 20: Introduction to Curriculum
  - ENGR 24: Descriptive Geometry
  - MATH 10*: Plane Trigonometry
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  - ENGR 24: Descriptive Geometry
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  - ENGR 20: Introduction to Curriculum
  - ENGR 24: Descriptive Geometry
  - MATH 10*: Plane Trigonometry
  - MATH 102*: Intermediate Algebra
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  - ENGR 20: Introduction to Curriculum
  - ENGR 24: Descriptive Geometry
  - MATH 10*: Plane Trigonometry
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  - ENGR 24: Descriptive Geometry
  - MATH 10*: Plane Trigonometry
  - MATH 102*: Intermediate Algebra
  - ENGR 17: Principles/Practices of Teaching Young Children
  - ENGR 20: Introduction to Curriculum
  - ENGR 24: Descriptive Geometry
  - MATH 10*: Plane Trigonometry
  - MATH 102*: Intermediate Algebra
  - ENGR 17: Principles/Practices of Teaching Young Children
  - ENGR 20: Introduction to Curriculum
  - ENGR 24: Descriptive Geometry

**TOTAL UNITS FOR CERTIFICATE**: 17
Engineer Technology A.S. Degree Restricted Electives (continued)

**Mechanical Electives**
- ENGR 33: Solid Modeling Computer-Aided Drafting 2
- ENGR 118: Blueprint and Specification Reading (Mechanical) 2

**Other Electives**
- AGNR 83: Introduction to Global Positioning Systems (GPS) 1
- ENGR 25: Structural Drafting 3
- ENGR 26: Industrial Drafting 3
- ENGR 64: Engineering Materials Testing 3
- ENGR 94: Engineering Worksite Learning 1-4
- ENGR 97: Special Topics .5-2
- ENGR 98: Special Lab .5-2

*May be used to fulfill General Education requirements. See a counselor.

**Associate in Science Degree Requirements**

**Major**
- ENGR 1A: Measurements and Plane Surveying 3
- ENGR 38: Strength of Materials for Engr. Tech/Cons. Mgmt. 3
- ENGR 29: Computer-Aided Drafting (CAD) 2
- ENGR 2: Career Planning for Engineering and Engr. Tech. 1
- MATH 102: Intermediate Algebra 3
- PHYS 2A: General College Physics 4

**General Education**
- MATH 102: Intermediate Algebra 3

**Electives & Graduation Requirements (to total at least 60)**

**REQUIREMENTS FOR CERTIFICATE:**

- **Some CORE courses may be double counted to fulfill General Education Electives & Graduation Requirements (to total at least 60)**

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

- **Some CORE courses may be double counted to fulfill General Education Electives & Graduation Requirements (to total at least 60)**

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS**

**Major**
- ECON 1A: Principles of Economics (MICRO) OR ECON 1B: Principles of Economics (MACRO) 3
- FSS 46*: Nutrition OR BIOL 5: Introduction to Human Biology 3
- FIRS 70: Fire Protection Organization 3
- FIRS 72: Fire Prevention Technology 3
- FIRS 74: Fire Protection Equipment and Systems 3
- FIRS 79: Fundamentals of Personal Fire Safety 3

*May be used to fulfill General Education requirements. See a counselor.

**Associate in Science Degree Requirements**

**Major**
- ECON 1A: Principles of Economics (MICRO) OR ECON 1B: Principles of Economics (MACRO) 3
- FSS 46*: Nutrition OR BIOL 5: Introduction to Human Biology 3

**General Education**
- **Some CORE courses may be double counted to fulfill General Education Electives & Graduation Requirements (to total at least 60)**

**Fire Technology**

The Fire Technology curriculum is planned to serve both as an in-service program and as a pre-employment two-year program for community college students aspiring to enter the field of firefighting. Each student must complete thirty-five and a half (35½) units. Fire Technology majors may be required to fulfill a tour of duty at a local fire station.

The suggested course sequence has been supplied to the Counseling Division by the Instructional Division. Students are urged to use this outline along with the Shasta College catalog. Particular attention should be paid to course prerequisites and to whether a class is taught Fall or Spring semester or both. Courses listed may be offered either spring or fall semesters, or at the discretion of the division.

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

- Students must complete the "CORE" courses listed below for their major. In addition, students must satisfy all the regular Assoc. in Science degree requirements. For a complete description of those requirements, please refer to the "Associate in Science" section of this catalog.

- **Students who want to complete the Firefighter I Academy should plan on committing one full semester to that class (25 total units).**

**CORE COURSES:**
- CMST 10*: Interpersonal Communication 3
- ECE 1*: Human Development 3
- ECE 2*: Child, Family and Community 3
- FSS 10: Introduction to Human Services 3
- FSS 12: Standards and Practices in Human Services 3
- FSS 16*: Marriage & Family 3
- FSS 18*: Adulthood and Aging 3
- FSS 25*: Nutrition OR
- FSS 46*: Personal Finance OR
- ECON 1A: Principles of Economics (MICRO) OR ECON 1B: Principles of Economics (MACRO) 3
- FSS 60*: Life Management 3
- FSS 94: Family Studies & Services Worksite Learning 1-4
- PSYC 1A*: General Psychology 3
- PSYC 41*: Social/Cultural Context of Childhood 3
- SOC 1*: Introduction to Sociology 3
- SOC 70*: Social Welfare 3

**TOTAL UNITS FOR CERTIFICATE** 41

Continued on next page
**California State Firefighter I and II Certification**

Students wishing to apply for California State Fire Marshal's Office Firefighter I or II certification must meet the following criteria:

- Complete the required coursework as outlined by the State Fire Marshal's Office.
- Work a minimum of either six months as a paid full-time firefighter or 12 months as a volunteer.
- A recommendation and signature on appropriate form from the Fire Chief of the department that a student works for or volunteers at is a mandatory requirement.

Note: No college in California certifies individuals as Firefighter I or Firefighter II. All certifications are approved by the Calif. State Fire Marshal's Office.

**Fire Technology – Wildland Firefighter I Academy**

Students completing this certificate will have the basic firefighting training as required by the U.S. Forest Service and California Department of Forestry for seasonal or permanent employment in fire fighting.

**REQUIREMENTS FOR CERTIFICATE:**

- FIRS 73 Wildland Firefighter I Academy  4 units total

**Geographic Information Systems**

Geographic Information Systems (GIS) are computer systems for the collection, management, analysis and display of geographically-referenced data. GIS is applied in a wide array of fields including planning, natural resources, transportation, business, public health, and emergency response. GIS and other geospatial technologies are also increasingly part of our daily lives; examples include GPS-enabled cell phones, Google Earth, and MapQuest. The Shasta College GIS Certificate prepares students for jobs collecting, editing, and mapping spatial data. Students develop a foundation in map and GIS principles. From this foundation, practical GIS skills are developed. Data from global positioning systems (GPS), Internet servers and other sources are collected and processed. This data is then used to produce high quality maps and to support decision-making. Worksite learning allows students to gain GIS work experience. Some courses are offered in Internet format.

**REQUIREMENTS FOR CERTIFICATE:**

**CORE COURSES:**

- GIS 1 Survey of Digital Mapping  1
- GIS 10 Introduction to GIS  3
- GIS 20 Spatial Databases  1
- GIS 21 GIS-CAD Integration  1
- GIS 22 Mobile GIS/GPS  1
- GIS 23 Raster GIS  1
- GIS 24 Customizing GIS  1
- GIS 25 GIS Projects  1
- GEOG 11 Map Principles  1
- GIS 94 Worksite Learning  2

**TOTAL UNITS FOR CERTIFICATE**  13

**ADDITIONAL SUPPORTING COURSES:**

- GIS 97 Special Topics in GIS  1
- ENGR 29 Computer-Aided Drafting  3
- CIS 1 Computer Literacy Workshop  3
- CIS 2 Introduction to Computer Science  3
- CIS 20 Access for Windows I  1
- AGNR 83 Introduction to GPS  1

35.5

**Hospitality – Baking – Culinary Arts Emphasis**

**REQUIREMENTS FOR CERTIFICATE:**

- BUAD 106 Business Math or Math Placement Level 3 or higher  3
- CULA 50 Safety and Sanitation  2
- CULA 172 Baking  2

**TOTAL UNITS FOR CERTIFICATE**  4-7

**Hospitality – Bartender – Culinary Arts Emphasis**

**REQUIREMENTS FOR CERTIFICATE:**

- CULA 50 Safety and Sanitation  2
- CULA 60 Beverage Management  2
- CULA 73 Introduction to Wine  2

**TOTAL UNITS FOR CERTIFICATE**  6

**Hospitality – Dining Room Management – Culinary Arts Emphasis**

**REQUIREMENTS FOR CERTIFICATE:**

- BUAD 106 Business Math or Math Placement Level 3 or higher  3
- CULA 50 Safety and Sanitation  2
- CULA 65 Dining Room Service  3
- CULA 73 Introduction to Wine  2
- HOSP 10 Introduction to Hospitality  3
- HOSP 45 Restaurants, Hotels, and Lawsful Management  2

**TOTAL UNITS FOR CERTIFICATE**  12-15

**Hospitality – European and California Wines**

**REQUIREMENTS FOR CERTIFICATE:**

- CULA 73 Introduction to Wine  2
- CULA 82 Wines of California  3
- CULA 84 Cultural Appreciation of Wine  3
- CULA 86 Wines of France and Italy  2
- CULA 88 The Wines of the North State  1

**TOTAL UNITS FOR CERTIFICATE**  11

**Hospitality – Line Cook – Culinary Arts Emphasis**

**REQUIREMENTS FOR CERTIFICATE:**

- CULA 45 Basic Food Production  5
- CULA 46 Advanced Foods  5
- CULA 50 Safety and Sanitation  2
- HOSP 10 Introduction to Hospitality  3

**TOTAL UNITS FOR CERTIFICATE**  15
### Hospitality Management – Winemaking and Marketing

The Winemaking and Marketing Certificate is designed to provide students with hands-on experience in winemaking, viticultural practices, and wine analysis. It is intended for the entrepreneur exploring business opportunities in the grape wine industry, and/or the prospective small winery employee, as well as the home winemaker, interested in career or skills development. Hands-on winemaking from crush through fermentation, sensory evaluation, product marketing, and food and wine pairing will be covered.

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>AGEH 94</td>
<td>Horticulture Worksite Learning</td>
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<td>AGVIT 80</td>
<td>Vineyard Design and Construction</td>
<td>1</td>
</tr>
<tr>
<td>AGVIT 81</td>
<td>Vineyard Care</td>
<td>1</td>
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<tr>
<td>CULA 66</td>
<td>Wine With Food</td>
<td>2</td>
</tr>
<tr>
<td>CULA 73</td>
<td>Introduction to Wine</td>
<td>2</td>
</tr>
<tr>
<td>CULA 74</td>
<td>Basic Winemaking</td>
<td>2</td>
</tr>
<tr>
<td>CULA 76</td>
<td>Intermediate Winemaking</td>
<td>2</td>
</tr>
<tr>
<td>CULA 78</td>
<td>Sensory Evaluation of Wine</td>
<td>2</td>
</tr>
<tr>
<td>CULA 80</td>
<td>Wine Sales and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>CULA 88</td>
<td>Wines of the North State</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 17

### Hospitality Management – Culinary Arts Concentration

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BUAD 66*</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>CULA 45</td>
<td>Basic Food Production</td>
<td>5</td>
</tr>
<tr>
<td>CULA 46</td>
<td>Advanced Foods</td>
<td>5</td>
</tr>
<tr>
<td>CULA 48</td>
<td>Gourmet Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>CULA 49</td>
<td>Menu Planning and Cost Analysis</td>
<td>2</td>
</tr>
<tr>
<td>CULA 50</td>
<td>Sanitation and Safety</td>
<td>2</td>
</tr>
<tr>
<td>CULA 55</td>
<td>Purchasing</td>
<td>2</td>
</tr>
<tr>
<td>CULA 60</td>
<td>Beverage Management</td>
<td>2</td>
</tr>
<tr>
<td>CULA 65</td>
<td>Dining Room Service</td>
<td>3</td>
</tr>
<tr>
<td>CULA 94</td>
<td>Culinary Arts Worksite Learning</td>
<td>3</td>
</tr>
<tr>
<td>CULA 159</td>
<td>Stocks, Soups, Sauces &amp; Basic Culinary Preparation</td>
<td>2</td>
</tr>
<tr>
<td>CULA 161</td>
<td>The Art of Garde Manger</td>
<td>2</td>
</tr>
<tr>
<td>CULA 172</td>
<td>Baking</td>
<td>2</td>
</tr>
<tr>
<td>FSS 25*</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 10</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 65</td>
<td>Hospitality Supervision</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 94</td>
<td>Hospitality Worksite Learning</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 44

*May be used to fulfill General Education requirements. See a counselor.

### Hospitality Management – Hotel/Restaurant Management Concentration

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 66*</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 80</td>
<td>Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>CULA 50</td>
<td>Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CULA 55</td>
<td>Purchasing</td>
<td>2</td>
</tr>
<tr>
<td>CULA 73</td>
<td>Introduction to Wines OR</td>
<td>2</td>
</tr>
<tr>
<td>CULA 66</td>
<td>Wine with Food</td>
<td>2</td>
</tr>
<tr>
<td>HOSP 10</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 20</td>
<td>Hospitality Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 35</td>
<td>Computer Applications in the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 40</td>
<td>Human Resource Mgmt. in the Hospitality Industry</td>
<td>3</td>
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<tr>
<td>HOSP 45</td>
<td>Restaurants, Hotels, and Lawful Management</td>
<td>2</td>
</tr>
<tr>
<td>HOSP 50</td>
<td>Hospitality Marketing, Sales and Advertising</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 60</td>
<td>Hospitality and Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 65</td>
<td>Hospitality Supervision</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 94</td>
<td>Hospitality Worksite Learning</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 42

*May be used to fulfill General Education requirements. See a counselor.

### Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>45</td>
</tr>
<tr>
<td>General Education</td>
<td>21**</td>
</tr>
<tr>
<td>Electives &amp; Graduation Requirements (to total at least 60)</td>
<td></td>
</tr>
</tbody>
</table>

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.

### Industrial Technology Certificate

The Industrial Technology Certificate is designed to provide employable knowledge and skills courses common to various industrial occupations for entry-level employment in diverse industries.

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIES 48</td>
<td>Hydraulics</td>
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<tr>
<td>ELEC 138</td>
<td>Fundamentals of Electronics and Electricity</td>
<td>3</td>
</tr>
<tr>
<td>INDE 101</td>
<td>Industrial Occupation Basics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 100</td>
<td>Technical Applications of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>WELD 70</td>
<td>Beginning Welding</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 15.5

### Journalism

This curriculum is designed to provide preparation for careers in newspaper and magazine editorial work, advertising and graphics, television and radio news, or public relations; and to provide a study of the media of mass communications for those students who feel it would contribute to their liberal education.

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 10</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 21*</td>
<td>Introduction to Mass Communications</td>
<td>3</td>
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<tr>
<td>JOUR 24</td>
<td>Newspaper Production</td>
<td>6</td>
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<tr>
<td>JOUR 27</td>
<td>Newswriting and Reporting</td>
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<tr>
<td>JOUR 29</td>
<td>Photjournalism</td>
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<tr>
<td>BUAD 76</td>
<td>Sales OR</td>
<td>3</td>
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<tr>
<td>MKTG 72</td>
<td>Advertising</td>
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</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 20

*Course is 2 units; should be repeated 2 times for a total of 6 units.

### REQUIREMENTS FOR ASSOCIATE IN ARTS DEGREE

Students must complete the courses required for the Certificate. In addition, students must fulfill the 33-33-unit general education pattern for CSU or IGETC.

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BUAD 66*</td>
<td>Business Communications</td>
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<td>Customer Service</td>
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</tr>
<tr>
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<td>Basic Food Production</td>
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<tr>
<td>CULA 46</td>
<td>Advanced Foods</td>
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<td>Gourmet Food Preparation</td>
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<td>Sanitation and Safety</td>
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<td>CULA 55</td>
<td>Purchasing</td>
<td>2</td>
</tr>
<tr>
<td>CULA 60</td>
<td>Beverage Management</td>
<td>2</td>
</tr>
<tr>
<td>CULA 65</td>
<td>Dining Room Service</td>
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</tr>
<tr>
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<tr>
<td>CULA 172</td>
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<td>2</td>
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<tr>
<td>FSS 25*</td>
<td>Nutrition</td>
<td>3</td>
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<tr>
<td>HOSP 10</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 65</td>
<td>Hospitality Supervision</td>
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</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 44

*May be used to fulfill General Education requirements. See a counselor.

### Associate in Arts Degree Requirements

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Major</td>
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<tr>
<td>General Education</td>
<td>21**</td>
</tr>
<tr>
<td>Electives &amp; Graduation Requirements (to total at least 60)</td>
<td></td>
</tr>
</tbody>
</table>

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.
Legal Assistant

The Legal Assistant Program is designed to prepare individuals for employment as legal assistants in law firms, corporations, banks, insurance companies, and government agencies. Legal assistants are also referred to as paralegals. The legal assistant, under the supervision of an attorney, provides a variety of services to lawyers and clients. These may include research, investigation, interviewing clients or witnesses, preparing depositions, and drafting legal memoranda and briefs. The legal assistant can do any type of legal work that does not involve giving advice to clients or representing clients in court. The faculty for this program consists of practicing attorneys. Classes are offered in the evening only.

Students considering this program should contact the Division Office at 530-242-7754 for pertinent information prior to registering for classes.

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 39</td>
<td>Introduction to Paralegalism</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 40</td>
<td>Legal Research and Writing I</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 41</td>
<td>Legal Research and Writing II</td>
<td>3</td>
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<tr>
<td>LEGL 42</td>
<td>Discovery</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 44</td>
<td>Civil Procedure and Litigation</td>
<td>3</td>
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<tr>
<td>LEGL 45</td>
<td>Torts</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 47</td>
<td>Contracts, Employment and Agency</td>
<td>2</td>
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<tr>
<td>LEGL 48</td>
<td>Family Law</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 49</td>
<td>Commercial Law</td>
<td>2</td>
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<tr>
<td>LEGL 53</td>
<td>Probate</td>
<td>3</td>
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<tr>
<td>LEGL 56</td>
<td>Criminal Law and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 94</td>
<td>Legal Assistant Worksite Learning</td>
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**REQUIRED ELECTIVE COURSES:**

Choose six (6) units from the following:

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<td>Business Law</td>
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</tr>
<tr>
<td>BUAD 8</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 43</td>
<td>Real Estate Law OR</td>
<td>3</td>
</tr>
<tr>
<td>REAL 33</td>
<td>Legal Aspects of Real Estate</td>
<td>3</td>
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<tr>
<td>LEGL 46</td>
<td>Bankruptcy Practices, Collections, and Judgments</td>
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</tr>
<tr>
<td>LEGL 50</td>
<td>Business Organizations</td>
<td>2</td>
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<tr>
<td>LEGL 51</td>
<td>Estate Planning</td>
<td>3</td>
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<tr>
<td>LEGL 55</td>
<td>Techniques of Interview and Investigation</td>
<td>2</td>
</tr>
<tr>
<td>LEGL 94</td>
<td>Legal Assistant Worksite Learning</td>
<td>2</td>
</tr>
<tr>
<td>OAS 91</td>
<td>Word for Windows I</td>
<td>1</td>
</tr>
</tbody>
</table>

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>42</td>
</tr>
<tr>
<td>General Education</td>
<td>21**</td>
</tr>
<tr>
<td>Electives &amp; Graduation Requirements</td>
<td>(to total at least 60)</td>
</tr>
</tbody>
</table>

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.**

Life Management

This certificate is designed to provide students with the information, perceptions and skills necessary to move toward responsible independence and effective interpersonal relationships. Resources such as time, money and energy will be stressed along with the study of the physical, mental, emotional and social needs of all ages. This curriculum is essential for preparing individuals to balance personal, family and work responsibilities throughout the life cycle.

All courses to be applied to the Life Management Certificate must be completed with a "C" grade or better.

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 1</td>
<td>Human Development</td>
<td>3</td>
</tr>
<tr>
<td>FSS 16</td>
<td>Marriage and Family</td>
<td>3</td>
</tr>
<tr>
<td>FSS 25</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FSS 46</td>
<td>Personal Finance</td>
<td>3</td>
</tr>
<tr>
<td>FSS 60</td>
<td>Life Management</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 15

**REQUIREMENTS FOR ASSOCIATE IN ARTS DEGREE:**

Students must complete the courses required for the Certificate. In addition, students fulfill the 33-39 unit general education pattern for CSU or IGETC.

**RECOMMENDED ELECTIVE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1</td>
<td>Music Fundamentals (pre-Music Major only)</td>
<td>3</td>
</tr>
<tr>
<td>MUS 7</td>
<td>Beginning Arranging and Songwriting</td>
<td>3</td>
</tr>
<tr>
<td>MUS 10</td>
<td>Music Appreciation (valid for G.E.)</td>
<td>3</td>
</tr>
<tr>
<td>MUS 11</td>
<td>History of Jazz and Rock (valid for G.E.)</td>
<td>3</td>
</tr>
<tr>
<td>MUS 12</td>
<td>Intro. to Computers and Elect. Inst. in Music</td>
<td>1.5</td>
</tr>
<tr>
<td>MUS 22</td>
<td>Beginning Piano (pre-Music Major only)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 29/30</td>
<td>Beginning/Intermediate Voice</td>
<td>1</td>
</tr>
<tr>
<td>MUS 61</td>
<td>Performance Analysis</td>
<td>.5</td>
</tr>
<tr>
<td>MUS 46</td>
<td>Shasta College Community Symphonic Band</td>
<td>1</td>
</tr>
<tr>
<td>MUS 47</td>
<td>Shasta College Community Jazz Ensemble</td>
<td>1</td>
</tr>
</tbody>
</table>

Associate in Arts Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>24</td>
</tr>
<tr>
<td>General Education</td>
<td>21**</td>
</tr>
<tr>
<td>Electives &amp; Graduation Requirements</td>
<td>(to total at least 60)</td>
</tr>
</tbody>
</table>

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.**

**REQUIREMENTS FOR CERTIFICATE:**

Completion of this Certificate will prepare the student for employment in retail music merchandising and private music instruction.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 2</td>
<td>Diatonic Harmony and Musicanship</td>
<td>5</td>
</tr>
<tr>
<td>MUS 3</td>
<td>Diatonic Harmony and Musicanship</td>
<td>5</td>
</tr>
<tr>
<td>MUS 4</td>
<td>Chromatic Harmony</td>
<td>5</td>
</tr>
<tr>
<td>MUS 5</td>
<td>20th Century Harmony</td>
<td>5</td>
</tr>
</tbody>
</table>

In addition, students must complete four units chosen from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 30</td>
<td>Intermediate Voice</td>
<td>1</td>
</tr>
<tr>
<td>MUS 31</td>
<td>Chamber Choir</td>
<td>1</td>
</tr>
<tr>
<td>MUS 33</td>
<td>Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUS 35</td>
<td>Vocal Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUS 39</td>
<td>Chamber Music</td>
<td>1</td>
</tr>
<tr>
<td>MUS 40</td>
<td>Concert Choir</td>
<td>1</td>
</tr>
<tr>
<td>MUS 41</td>
<td>Shasta College Women’s Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUS 42</td>
<td>Shasta College Community Chorale</td>
<td>1</td>
</tr>
<tr>
<td>MUS 43</td>
<td>Shasta College Community Symphony</td>
<td>1</td>
</tr>
<tr>
<td>MUS 44</td>
<td>Shasta College Youth Symphony</td>
<td>.5-1</td>
</tr>
<tr>
<td>MUS 45</td>
<td>Wind Band</td>
<td>1</td>
</tr>
<tr>
<td>MUS 46</td>
<td>Shasta College Community Symphonic Band</td>
<td>1</td>
</tr>
<tr>
<td>MUS 47</td>
<td>Shasta College Community Jazz Ensemble</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 24
**Nurse Aide/Home Health Aide**

Curriculum for this course is designed to prepare a student to work in any one of several health care situations, (acute care hospital, long term care, and home care).

**REQUIREMENTS FOR ENROLLMENT INTO THE PROGRAM**

Students, at their expense, are required to meet all health and safety clinical requirements prior to entering the Nurse Aide/Home Health Aide course. Students must meet established physical criteria to participate in the clinical area. See program web page for specific information.

http://www.shastacollege.edu/HSUP

**CORE COURSE:**

HEOC 180  Nurse Aide/Home Health Aide  13

**TOTAL UNITS FOR CERTIFICATE:**  13

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**Nursing – Associate Degree Nursing**

The educational objective of the Associate in Science Degree Nursing program is to prepare the student who, upon graduation and successful completion of the NCLEX-RN, will be able to function within the scope of nursing as defined by the State of California Nursing Practice Act. Students must meet established physical criteria to participate in the clinical area.

**NOTE:** All students participating in clinical rotations must submit proof of immunizations, TB clearance, and physical examination; pass a drug screening and a background check; and, have current certification in cardiopulmonary resuscitation (CPR) for the health professional according to established program process prior to going into clinical facilities. Students are financially responsible for meeting these requirements. See division/program web page at http://www.shastacollege.edu/HSUP or call Division Office (530-339-3600) for specific requirements, procedures, and deadlines.

**Graduation Requirements:**

1. Completion of the Humanities requirement
2. Completion of competence in math (MATH 102 Inter. Algebra or MATH 110 Essential Math are the advised course for meeting this requirement)
3. Completion of the multi-cultural awareness requirement
4. Completion of computer literacy

Due to the time commitments of the A.D.N. program, it is strongly recommended to complete the graduation requirement before entering the program.

**REQUIREMENTS FOR ENROLLMENT IN THE PROGRAM:**

Students filing enrollment packets for the LVN/RN program must complete the following prerequisite science courses listed below with a grade of "C" or better in each course.

**CORE COURSE:**

ENGL 1A*  College Composition  4

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

Students must be enrolled in the ADN program. Students must then complete the courses listed below.

**CAREER COURSES:**

REGN 20  Theoretical Concepts/Medical Surgical Nursing II  7
REGN 21  Clinical Concepts/Medical Surgical Nursing II  5
REGN 33  Theoretical Concepts Medical/Surgical Nursing III  6
REGN 34  Clinical Concepts Medical/Surgical Nursing III  6

**TOTAL UNITS FOR MAJOR CORE:**  48

---

**Nursing – Associate Degree Nursing Program (continued):**

**Associate in Science Degree Requirements**

**Major**

**General Education**  21**

**Electives & Graduation Requirements (to total at least 60)**

**Some CORE courses may be double counted to fulfill General Educ. Requirements. Please check with your counselor to see if courses are double counted.**

**NOTE:** In order to progress through the nursing courses, students must demonstrate competence in both the theory and clinical components. Failing or Withdrawing from any one of the semester's corequisite courses requires withdrawal from all of that semester's corequisite courses.

Students with previous nursing education who have been enrolled in a class will be given the opportunity to receive units and credit toward completion of the A.S. degree program by challenging in theory and clinical performance (this is only after being enrolled in the class). Licensed Vocational Nurses may apply for the LVN-RN Associate Degree Nursing Program. LVNs may elect to take a non-degree program under the BRN regulation 1429 – the 30 unit option. This consists of twenty (20) units of nursing and ten (10) units of related science. REGN 20X, REGN 21X, REGN 33X, and REGN 34X are the required 20 units of nursing plus microbiology and physiology the required 10 units of science. Students must see program director if considering this option.

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**ENROLLMENT CRITERIA FOR THE LVN-RN PROGRAM:**

Students filing enrollment packets for the LVN/RN program must complete the following prerequisite science courses listed below with a GPA of 2.5. LVN-RN applicants will also need to complete graduation requirements prior to submitting an application packet.

**Graduation Requirements:**

1. Completion of the Humanities requirement
2. Completion of competence in math (MATH 102 Inter. Algebra or MATH 110 Essential Math are the advised course for meeting this requirement)
3. Completion of the multi-cultural awareness requirement
4. Completion of computer literacy

**PREREQUISITE COURSES:**

ANAT 1*  Anatomy  5
MICR 1**  Microbiology  5
PHY 1*  Physiology (with lab)  5

Students filing enrollment packets for the LVN-RN program must complete the following prerequisites courses listed below with a grade of C or higher:

**ENGLISH 1A**  College Composition  4

**PSYC 1A**  General Psychology OR  3
PSYC 14*  Understanding Human Behavior

**SOC 1**  Introduction to Sociology OR  3
SOC 2**  Social Problems OR

**ANTH 2**  Cultural Anthropology

**CMST 10**  Interpersonal Communication OR  3
CMST 54**  Small Group Communication OR
CMST 60**  Public Speaking

REGN 79  LVN-RN Transition  2

**TOTAL UNITS FOR PREREQUISITES:**  30

---

**REQUIREMENTS FOR ASSOC. IN SCIENCE DEGREE (LVN-RN Program):**

Students must be enrolled into the ADN program. Students must then complete the courses listed below.

**CORE COURSES:**

REGN 20  Theoretical Concepts/Medical Surgical Nursing II  7
REGN 21  Clinical Concepts/Medical Surgical Nursing II  5
REGN 33  Theoretical Concepts Medical/Surgical Nursing III  6
REGN 34  Clinical Concepts Medical/Surgical Nursing III  6

**TOTAL UNITS FOR CORE:**  24

**May be used to fulfill General Education requirements. See a counselor.**

**Check course description for prerequisite**

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**Nursing – Associate Degree Nursing Program (continued):**

**Electives & Graduation Requirements (to total at least 60)**

**Associate in Science Degree Requirements (LVN-RN Option)**

**Major**

**General Education**  21**

**Some CORE courses may be double counted to fulfill General Educ. Requirements. Please check with your counselor to see if courses are double counted.**

**ENROLLMENT CRITERIA FOR THE 30-UNIT OPTION – NON DEGREE – LVN-RN PROGRAM:**

LVNs may elect to take a non-degree program under the BRN regulation 1429 – the 30 unit option. This consists of twenty (20) units of nursing and ten (10) units of related science. REGN 20X, REGN 21X, REGN 33X, and REGN 34X are the required 20 units of nursing. Microbiology and physiology are the required 10 units of science. Students must see nursing program director if considering this option.

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**Updated 5/19/10**

**Changes indicated in red**
Office Administration –
Administrative Office Professional

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:
This degree prepares you to be an advanced-level Administrative Assistant. Administrative Assistants work for supervisors, managers, and executives. Skills learned: Document and Data Handling: How to prepare, modify, and proofread documents such as reports, letters, memos, records, lists, and schedules. Technology: Working knowledge of Microsoft Office: Word, Excel, and Outlook. Setup and coordinate meetings and conferences using Outlook. Intermediate knowledge of Microsoft Office: PowerPoint, Internet Explorer, and Access. Incorporate computer graphics in documents, in addition to computer based filing methods and procedures. Type 45-50 words per minute. Interpersonal: Meet and greet clients and visitors, maintain a pleasant manner, and projection of a professional image in person and on the phone. Confidential: Handling of mail, money, and receipts, and record keeping. General: Research and price office furniture and supplies with attention to detail. Sales concepts, including markups, discounts, insurance, and depreciation. Scheduling and reporting duties, coordinate and maintain records for staff. It is highly recommended that on the job training be obtained through the Worksite Learning course at Shasta College.

CORE COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 103</td>
<td>PC Accounting</td>
<td>2</td>
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<tr>
<td>BUAD 45 *</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 66 *</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 166</td>
<td>Business English</td>
<td>3</td>
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<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>CIS 10</td>
<td>Excel for Windows – I</td>
<td>3</td>
</tr>
<tr>
<td>OAS 51</td>
<td>Keyboarding I (Beginning Typing)</td>
<td>3</td>
</tr>
<tr>
<td>OAS 84</td>
<td>Computerized 10-Key</td>
<td>3.5</td>
</tr>
<tr>
<td>OAS 80</td>
<td>Outlook</td>
<td>1</td>
</tr>
<tr>
<td>OAS 152</td>
<td>Keyboarding for Speed and Accuracy</td>
<td>0.5</td>
</tr>
<tr>
<td>OAS 157</td>
<td>Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OAS 158</td>
<td>Medical Office Procedures</td>
<td></td>
</tr>
<tr>
<td>TOTAL UNITS FOR CERTIFICATE</td>
<td></td>
<td>43</td>
</tr>
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</table>

*May be used to fulfill General Education requirements. See a counselor.

REQUIREMENTS FOR CERTIFICATE:
This certificate prepares you to be an intermediate-level Administrative Assistant. Administrative Assistants work for supervisors, managers, and executives. Skills learned: Document and Data Handling: How to prepare, modify, and proofread documents such as reports, letters, memos, records, lists, and schedules. Technology: Working knowledge of Microsoft Office: Word, Excel, Internet Explorer, and Outlook. Type 35-40 words per minute. Interpersonal: Meet and greet clients and visitors, maintain a pleasant manner, and projection of a professional image in person and on the phone. Confidential: Handling of mail, money, and receipts, and record keeping. General: Research and price office furniture and supplies with attention to detail. Sales concepts, including markups, discounts, insurance, and depreciation. Scheduling and reporting duties, coordinate and maintain records for staff. It is highly recommended that on the job training be obtained through the OAS 84 Worksite Learning course at Shasta College.

CORE COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 45</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 166</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>CIS 10</td>
<td>Excel for Windows – I</td>
<td>3</td>
</tr>
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</tr>
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<td>OAS 84</td>
<td>Computerized 10-Key</td>
<td>3.5</td>
</tr>
<tr>
<td>OAS 80</td>
<td>Outlook</td>
<td>1</td>
</tr>
<tr>
<td>OAS 152</td>
<td>Keyboarding for Speed and Accuracy</td>
<td>0.5</td>
</tr>
<tr>
<td>OAS 157</td>
<td>Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OAS 158</td>
<td>Medical Office Procedures</td>
<td></td>
</tr>
<tr>
<td>TOTAL UNITS FOR CERTIFICATE</td>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>
Office Administration – Health Information Management

This curriculum is designed to prepare the individual with clerical medical office skills for entry-level employment in physicians’ offices, health care facilities, clinics, laboratories, health and accident insurance companies, and related clerical duties essential to medical office assisting. It is highly recommended that on-the-job training be obtained through the OAS 84 Worksite Learning course at Shasta College.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

**CORE COURSES:**
- BUAD 45 * Human Relations on the Job 3
- BUAD 66 * Business Communications 3
- BUAD 166 Business English 3
- CIS 1 Computer Literacy Workshop 3
- CIS 10 Excel I 1
- HEOC 110 Beginning Medical Terminology 3
- HEOC 111 Advanced Medical Terminology 3
- OAS 51 Keyboarding I-Beginning Typing 3
- OAS 52 Keyboarding II-Intermediate Typing 3
- OAS 64 Computerized Ten-Key 0.5
- OAS 80 Outlook 1
- OAS 112 Basic ICD-9-CM and CPT-4 Coding 3
- OAS 113 Advanced ICD-9-CM and CPT-4 Coding 3
- OAS 114 Healthcare Billing and Reimbursement 3
- OAS 150 Computerized Medical Account Management 3
- OAS 152 Keyboarding for Speed and Accuracy 3
- OAS 155 Medical Office Procedures 3
- OAS 159 Word Processing I - Medical Transcription 1.5
- OAS 160 Word Processing II-Med. Transcription 1.5
- OAS 166 Records Management 2
- OAS 171 Proofreading Skills 2

**ELECTIVES & GRADUATION REQUIREMENTS (to total at least 60)***

- **Health Information Management:**
  - OAS 158 Advanced Health Record Management
  - OAS 166 Computerized Medical Account Management
  - OAS 170 Medical Transcription

**52 TOTAL UNITS FOR CERTIFICATE**

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.**

REQUIREMENTS FOR CERTIFICATE:

- **CORE COURSES:**
  - BUAD 41 Leadership and Supervision 3
  - BUAD 45 Human Relations on the Job 3
  - BUAD 66 Business Communications 3
  - BUAD 77 Principles of Management 3
  - BUAD 106 Business Mathematics 3
  - BUAD 176 Retail Management 3
  - CIS 1 Computer Literacy Workshop 3
  - CMST 10 Interpersonal Communication 3

**30 TOTAL UNITS FOR CERTIFICATE**

**Retail Management**

This program is designed to enable students to find entry-level positions in the retail selling areas as sales personnel.

Students considering this certificate should contact the Division Office at 530-242-7754 for pertinent information prior to registering for classes.

**THEATRE ARTS**

REQUIREMENTS FOR CERTIFICATE:

**CORE COURSES:**
- THTR 1 Introduction to Theatre Arts 3
- THTR 8 Theatre Appreciation I 3
- THTR 12 Acting for the Stage I
- THTR 30 Stagecraft I 3
- THTR 41 Theatre Laboratory OR
- THTR 70 Repertory Theatre I

**27 TOTAL UNITS FOR CERTIFICATE**

In addition, students must complete six units chosen from the following Theory courses:
- THTR 5 20th Century Theatre 3
- THTR 9 Theatre Appreciation II 3
- THTR 13 Acting for the Stage II 2
- THTR 29 Directing 2
- THTR 31 Stagecraft II 3
- THTR 34 Makeup 2
- THTR 37 Theatre Management 3
- THTR 81 Introduction to Playwriting 3

And four units from the following Practicum courses:
- THTR 24 Mainstage Production II – Music 1-4
- THTR 25 Mainstage Production II - Choreography 1-4
- THTR 42 Stage Production Laboratory 1-4
- THTR 60 Special Projects-Production 1-4
- THTR 61 Costuming Laboratory 1-3
- THTR 70 Repertory Theatre I 1-4
- THTR 74 Repertory Theatre – Technical 1-4
- THTR 97 Special Studio Topics: Theatre 1-3
- THTR 98 Special Topics: Theatre 1-3

**33 TOTAL UNITS FOR CERTIFICATE**

REQUIREMENTS FOR ASSOCIATE IN ARTS DEGREE:

Students must complete the courses required for the Certificate. In addition, students fulfill the 33-39-unit general education pattern for CSU or IGETC.

**Associate in Arts Degree Requirements**

<table>
<thead>
<tr>
<th>Major</th>
<th>General Education</th>
<th>Electives &amp; Graduation Requirements (to total at least 60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-24.27</td>
<td>21**</td>
<td>Degree units corrected 4/9/15</td>
</tr>
</tbody>
</table>

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.**
Transition Certificate for Students with Intellectual Disabilities

This curriculum is designed to provide an integrated and inclusive educational option, in a post-secondary setting, structured to equip each student for a more meaningful style of participation in community, vocational and independent living settings.

REQUIREMENTS FOR CERTIFICATE:

- ADAP 210 Career Development 1
- ADAP 254 Adapted Computer Skills: Semester 1 1
- ADAP 254 Adapted Computer Skills: Semester 2 1
- ADAP 255 Human Awareness: Semester 1 2
- ADAP 255 Human Awareness: Semester 2 2
- ADAP 256 Reading for Life Skills: Semester 1 2
- ADAP 256 Reading for Life Skills: Semester 2 2
- ADAP 258 Math for Life Skills: Semester 1 2
- ADAP 258 Math for Life Skills: Semester 2 2

TOTAL UNITS FOR CERTIFICATE 15

Virtual Assistant Certificate

The Virtual Assistant Certificate program prepares the student to develop a business as a virtual assistant. This is a fairly new and emerging administrative profession where individuals work from their homes as independent contractors.

- BUAD 66 Business Communications 3
- BUAD 85 Customer Service in the Workplace .5
- BUAD 186 Business English 3
- CIS 83 Web Design Using Dreamweaver 2
- OAS 30 Creating and Managing a Virtual Office 3
- OAS 31 Marketing Yourself as a Virtual Assistant 3
- OAS 80 Outlook 1
- OAS 86 Integrated Computer Applications 2

TOTAL UNITS FOR CERTIFICATE 17.5

Watershed Restoration Certificate

This certificate provides full-time students as well as professionals related to various agencies and industries an opportunity to obtain knowledge, skills and hands-on training related to the many facets of watershed restoration including regulation, mapping, water quality, data collections, recent advances in erosion control and bio-engineering applications and techniques, and heavy equipment operations.

REQUIREMENTS FOR CERTIFICATE:

- AGNR 50 Natural Resources Measurements 4
- AGNR 64 Watershed Management and Ecology 3
- AGNR 66 Watershed Restoration 1
- CONS 46 Equipment Operations and Maintenance 3
- CONS 47 Project Construction for Equipment Operations 3

TOTAL UNITS FOR CERTIFICATE 14

Water/Wastewater Treatment

This program is designed to provide entry-level training and upgrading for California water and wastewater public and private agency operators. A student seeking introduction into either water or wastewater fields would benefit by taking the entire course offerings. It is strongly recommended that students complete MATH 101-Basic Algebra and CHEM 2A-Introduction to Chemistry before completing the requirements of the program.

REQUIREMENTS FOR CERTIFICATE:

- WTT 177 Introduction to Wastewater Treatment 3
- WTT 180 Introduction to Water Treatment Tech 3
- WTT 181 Intermediate Water Treatment Tech 3
- WTT 183 Intermediate Wastewater Treatment 3
- WTT 184 Small Water Systems and Distribution 3
- WTT 186 Advanced Wastewater Treatment 3

TOTAL UNITS FOR CERTIFICATE 18

Welding Technology

The Welding Technology Program is designed to prepare students for positions in a variety of trades or service industries requiring technically trained and/or certified welders. The program is designed to prepare students for the opportunity to become certified welders under the standards set by the American Welding Society. Students can receive their certification by the American Welding Society in a variety of processes as part of the instructional program. The program is available in three formats:

- Associate in Science Degree in Welding Technology
- Certificates from Shasta College in Welding Technology
- Certification by the American Welding Society as a certified welder

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

CORE COURSES:

- DIES 48 Hydraulics 3.5
- ENGL 1A* College Composition 4
- ENGR 118 Blueprint and Specification Reading (Mechanical) 2
- INDE 1 Career Planning for Industrial Technology 1
- MATH 110* Essential Math 3
- WELD 70 Beginning Welding 3
- WELD 73 Structural Steel Metal Fabrication 3
- WELD 170 Introduction to ARC Welding 3
- WELD 171 Intermediate ARC Welding 3
- WELD 174 Structural Steel MIG Welding 3
- WELD 175 TIG Welding 3
- WELD 178 Pipe Welding Fundamentals 3
- WELD 182 Advanced ARC Welding 1
- WELD 184 Advanced GTAW (TIG) Welding 1
- WELD 186 Advanced Pipe Welding 2
- WELD 188 Advanced GMAW (MIG) Welding 1

TOTAL UNITS 39.5

*May be used to fulfill General Education requirements. See a counselor.

REQUIREMENTS FOR ONE-YEAR/FAST TRACK CERTIFICATE:

- DIES 48 Hydraulics 3.5
- ENGL 190** Reading and Writing II **(see below for alternative) 4
- ENGR 118 Blueprint & Specification Reading 2
- INDE 1 Career Planning 1
- MATH 100 Technical Applications of Mathematics 3
- WELD 70 Beginning Welding 3
- WELD 73 Structural Steel Metal Fabrication 3
- WELD 170 Introduction to ARC Welding 3
- WELD 171 Intermediate ARC Welding 3
- WELD 174 Structural Steel MIG Welding 3
- WELD 175 TIG Welding 3
- WELD 178 Pipe Welding Fundamentals 3

TOTAL UNITS 34.5

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.

CERTIFICATE REQUIREMENTS:

- American Welding Society Certification

- Students may choose one of the following alternatives: ENGL 190 OR a combination of ENGL 191, and two units selected from the following courses: ENGL 192, ENGL 193 or ENGL 194 for a total of 4 units.

**Certification by the American Welding Society is dependent upon the meeting of criteria as determined by the certified welding inspector. The completion of these courses is recommended, but does not guarantee certification by the American Welding Society.

- WELD 182 Advanced ARC Welding 1
- WELD 184 Advanced GTAW (TIG) Welding 1
- WELD 186 Advanced Pipe Welding 2
- WELD 188 Advanced GMAW (MIG) Welding 1

TOTAL UNITS 3.5

Associate in Science Degree Requirements

- Major 21**
- General Education 39.5
- Electives & Graduation Requirements (to total at least 60)

**Some CORE courses may be double counted to fulfill General Education requirements. Please check with your counselor to see if courses are double counted.

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