Chapter 5 – Degrees, Programs and Certificates

Associate Degree Requirements

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.

ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T) or ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T) requirements:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors or transfer institutions may require a higher GPA. Please consult with a counselor for more information.
3. Completion of a minimum of 18 semester units in an “AA-T” or “AS-T” major as detailed in this section of the catalog. All courses in the major must be completed with a grade of C or better or a “P” if the course is taken on a “pass-no pass” basis (title 5 § 55083).
4. Certified completion of the California State University General Education-Breadth pattern (CSU GE Breadth) (see page 26 for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 28 for more information).

ASSOCIATE IN ARTS (AA) and ASSOCIATE IN SCIENCE (AS) DEGREE requirements:

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.

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.

Note: Any student completing the General Education requirements for the CSU system or IGETC will also have met the General Education requirements for the Shasta College Associate Degree.

V. Competency Graduation Requirements – AA/AS 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:
      - 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 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, the GE pattern, and/or Multi-Cultural/Graduation requirement. 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 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.

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. **AA-T Transfer Degree – Refer to Degrees and Certificates section in the catalog and see your counselor for complete requirements.**

3. **Other AA Degrees:**
   - Communication Studies
   - 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.

**Certificates**

| Accounting Clerk/Bookkeeper | Computer Maintenance | Hospitality Management |
| Agriculture-Equine Science | Construction Technology | Culinary Arts Concentration |
| Agriculture-Enviromental Horticulture | CSU - General Education | Hotel/Restaurant Management |
| Agriculture-Equine Science | Customer Service Academy | Concentration |
| Agriculture-Forest Science and Technology | Diesel Technology | Industrial Technology |
| Agriculture-Horticulture | Dietary Service Supervisor | IGETC – General Education |
| Agriculture-Natural Resources | Early Childhood Education | Journalism |
| Agriculture-Sustainable Agriculture Science | ECE-Family Childcare | Life Management |
| Automotive Chassis | Engineering Technology | Music |
| Automotive Electrical-Electronics | Firefighter I Cert Program | Nurse Aide/Home Health Aide |
| Automotive Engine Performance | Firefighter II Cert Program | Nursing-Vocational Nursing |
| Automotive Heating-Air Conditioning | Fire Tech-Wildland Firefighter I Academy | Office Administration |
| Automotive Powertrain | Baking – Culinary Arts Emphasis | Administrative Office Assistant |
| Business Administration – Workplace Success | Bartender – Culinary Arts Emphasis | Administrative Office Professional |
| Computer Aided Drafting (CAD) Technology | Dining Room Management – Culinary Arts | Health Information Management |
| Computer & Information Systems | Dining Room Staff – Culinary Arts | Retail Management |
| Cisco Networking | Emphasis | Theatre Arts |
| Computer Networking (CCNA) | Emphasis | Transition Certificate for Students with Intellectual Disabilities |
| Web Design | Enology and Viticulture Practices | Watershed Restoration |
| Line Cook – Culinary Arts Emphasis | European and California Wines | Water/Wastewater Treatment |
| Winemaking and Marketing | | Welding |
General Education - 21 units (plus a major field of study = 60 units)

The goal of general education is a more well-rounded individual with a broad understanding of the physical universe, people as individuals and as members of society, artistic and cultural expression, written composition, oral communication, analytical thinking, multicultural environments and perspectives of people from other cultures and backgrounds.

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 Rationale; 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. A course cannot be counted in more than one general education area of study, with the exception of Area 6, the Multicultural Requirement. The course used to satisfy the Multicultural Requirement may also be used to satisfy one of the other areas if appropriate.

### 1. NATURAL SCIENCE-- Three (3) units required.
Courses in the Natural Science GE area examine the physical universe, its life forms and its natural phenomena. After successful completion of a course from this area, a student will be able to use the scientific method to conduct basic experiments, collect, analyze, and evaluate data in a lab setting, or will be able to use scientific inquiry skills related to hypothesis, prediction, assumption, interpretation and evaluation.

<table>
<thead>
<tr>
<th>AGAS 10 Prin of Animal Sci.</th>
<th>BIOL 1 Prin of Biol</th>
<th>CHEM 6 Chem Enviro</th>
<th>ESCI 14 Meteorology</th>
<th>PHYS 101 Tech Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEH 33 Env Hort</td>
<td>BIOL 5 Human Biol</td>
<td>CHEM 10 Chem Lab</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>ESCI 16 Chem Prob Solv</td>
<td>ESCI 17 Earth Sys Sci</td>
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<tr>
<td>AGNR 60 Envir Science</td>
<td>BIOL 12 Field Biology</td>
<td>ESCI 1 Phys Geo</td>
<td>ESCI 18 Global Climate</td>
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</tr>
<tr>
<td>AGNR 64 Watershed Mgmt</td>
<td>BIOL 45 Ecology</td>
<td>ESCI 5 Intro Geo</td>
<td>FSS 25 Nutrition</td>
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<tr>
<td>AGNR 67 Energy &amp; Envr</td>
<td>BIOL 160 Zoology</td>
<td>ESCI 6 Anim Biology</td>
<td>GEOG 1A/1B Phys Geo</td>
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<tr>
<td>AGPS 20 Plant Sci</td>
<td>BIOL 170 Ento</td>
<td>ESCI 7 Int GeoCA</td>
<td>MCR 1 Microbiology</td>
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<tr>
<td>AGPS 24 Soils</td>
<td>BIOL 180 Biol Aging</td>
<td>ESCI 8 Planetary Geo</td>
<td>NHIS 15 Natural History</td>
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<tr>
<td>ANAT 1 Anatomy</td>
<td>BOT 1 Botany</td>
<td>ESCI 9 Earthquakes</td>
<td>PHSC 1 Phys Sci Surv</td>
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</tr>
<tr>
<td>ANTH 1 Phys Anthro</td>
<td>CHEM 1AB Gen Chem</td>
<td>ESCI 10 Envir Geo</td>
<td>PHYS 2AB Gen Phys</td>
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</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>
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<td>ZOOL 15, 63</td>
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</table>

### 2. SOCIAL AND BEHAVIORAL SCIENCES-- Three (3) units required.
Courses in the Social and Behavioral Sciences GE area focus on people as individuals and as members of society. After successful completion of a course from this area, a student will be able to describe, explain, compare, and critique methods of inquiry used by the social and behavioral sciences, or will be able to apply concepts from the social sciences in order to analyze, evaluate, classify, and explain human behavior, or will be able to identify and discuss how societies and social subgroups operate.

<table>
<thead>
<tr>
<th>ADJU 10 Intro to AOJ</th>
<th>ECE 2 Child/Family/Comm</th>
<th>GEOG 8 Wrld Reg Geo*</th>
<th>JOUR 21 Mass Commun</th>
<th>PSYC 20 Cross Cult 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 41 Cult Soc Child*</td>
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<tr>
<td>AGPS 26 Calif. Water</td>
<td>ECON 1AB Economics</td>
<td>HIST 2/3 World Civilization</td>
<td>POLS 1 2 Amer Govt</td>
<td>PSYC 46 Hum Mem/Lng,</td>
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<tr>
<td>ANTH 2 Cultural Anth*</td>
<td>ECON 2 Econ Issues</td>
<td>HIST 17AB US History</td>
<td>POLS 10 Polt 3rd World*</td>
<td>SOC 2 Social Problems</td>
</tr>
<tr>
<td>ANTH 5 Human/.Cult./Ecol</td>
<td>ECON 17 Econ History</td>
<td>HIST 25 Afrn. Am. Hist*</td>
<td>POLS 20 Polt 20th 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 36 History Far East*</td>
<td>PSYC 1A Gen Psy</td>
<td>SOC 22 Soc of Aging</td>
</tr>
<tr>
<td>ARCH 3 Prin of Arch</td>
<td>FSS 60 Life Management</td>
<td>HIST 38 Hist World Relig*</td>
<td>PSYC 5 Human Sexuality</td>
<td>SOC 25 Soc Minorities*</td>
</tr>
<tr>
<td>ARCH 4A Field Arch.</td>
<td>GEOG 1A Physical Geo</td>
<td>HIST 40 Hist Gov of CA</td>
<td>PSYC 14 Und Hum Beh</td>
<td>SOC 30 Soc. Of Gender*</td>
</tr>
<tr>
<td>CMST 20 Intercur. Comm.</td>
<td>GEOG 1B Cultural Geo*</td>
<td>HIST 55 Hist Amer Front</td>
<td>PSYC 15 Soc Psychology</td>
<td>SOC 70 Social Welfare</td>
</tr>
<tr>
<td>ECE 1 Human Develop</td>
<td>GEOG 5 Digital Planet</td>
<td>HIST 57 Russian History</td>
<td>PSYC 16 Health Psy</td>
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<td>GEOG 7 Calif Geography*</td>
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<td>PSYC 17 Abnormal Psy</td>
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### 3. HUMANITIES-- Three (3) units required.
Courses in the Humanities GE area are which study the cultural activities and artistic expressions of human beings. After successful completion of a course from this area, a student will be able to express verbally and in writing examples of how peoples of different times and cultures relate to their environments through individual artistic expression and shared cultural traditions, will be able to critically assess and discuss exemplars of verbal and cultural artifacts utilizing qualitative, contextual criteria, or will be able to describe, explain, evaluate, compare and contrast, theories that philosophers have used to understand the nature of reasoning, reality and value.

<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 Apprc</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 1/2/3/4 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 1/2/3/4 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 1/2/3/4 German*</td>
<td>PHIL 7 Ethics/Right/Wrong</td>
<td>THR 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>THR 5/20th Cent Theatre</td>
</tr>
<tr>
<td>ENGL 18 Lit &amp; Comp</td>
<td>ENGL 19 Bible as Lit</td>
<td>HUM 4 Human thru Film</td>
<td>PHIL 10 Life/Death Moral</td>
<td>THR 8 Theatre App</td>
</tr>
<tr>
<td>ENGL 10AB World Lit</td>
<td>ENGL 20 World Mythology*</td>
<td>HUM 70 Explor Cont TV</td>
<td>RUSI 1/2/3/4 Russian*</td>
<td>THR 9 Theatre App II</td>
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<tr>
<td>ENGL 11A/B Surv/Am. Lit</td>
<td>ENGL 24 Multicult Pers*</td>
<td>JAPN 1/2/3/4 Japanese*</td>
<td>SL 90 &amp; 92 Sign Lang*</td>
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<tr>
<td>ENGL 12 Short Fiction</td>
<td>ENGL 25 Linguistics</td>
<td>JPN 19+20 Japanese Conv</td>
<td>SL 94 Sign Language III*</td>
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</table>

### 4. LANGUAGE AND RATIONALITY-- Courses in the Language and Rationale GE Area are which study the principles and applications of language toward logical thought, clear and precise expression and critical evaluation or communication in whatever symbol system the student uses.

#### a. English Composition-- Three (3) units required.
Courses fulfilling the written composition requirement are designed to include both expository and argumentative writing. After successful completion of a course from this area, a student will be able to write clear, logically organized essays using expository and argumentative modes and applying conventions of documentation when appropriate.

| ENGL 1A College Composition | BUAD 66 Business Communication |

#### b. Oral Communication-- Three (3) units required.
Courses fulfilling the oral communication requirement are designed to emphasize 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. After successful completion of a course from this area, a student will be able to identify and discuss the role oral communication plays in academic, social, and professional endeavors or will be able to demonstrate oral competency by constructing messages appropriate to particular communication situations covered in their particular courses.

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<tbody>
<tr>
<td>CMST 20 Intercur Comm.*</td>
<td>CMST 40 Argument/Debate</td>
<td>CMST 60 Public Speaking</td>
</tr>
</tbody>
</table>
c. **Analytical Thinking** – Three (3) units required. Courses fulfilling the analytical thinking requirement include mathematics, logic, statistics, computer language and programming and related disciplines. Courses in this area may be used to meet the math competency requirement. After successful completion of a course from this area, a student will be able to apply logical reasoning to collect and critically evaluate information, or construct a formal argument complete with support and reach a logical conclusion, or apply logical reasoning to solve problems.

### See Math Competency Requirement listed below

#### AS Level Math:
- MATH 102 Intermediate Algebra
- MATH 110 Essential Math

#### Other Math Courses:
- MATH 2 Precalculus
- MATH 3AB Calculus
- MATH 8 Finite Mathematics
- MATH 9 Survey of Calculus
- MATH 10 Trigonometry
- MATH 11 Patterns of Math
- MATH 13 College Algebra
- MATH 14 Statistics
- MATH 17 Calculus App Soc/Life Sci
- MATH 41AB Conc./Elem Math

#### Other acceptable courses if math competency has been satisfied:
- CIS 2 Intro Computer Science
- CIS 60 Visual Basic Programming
- CIS 61 C++ Lang Programming
- CIS 62 Java Programming
- CIS 63 Assembler Lang Program.
- PHIL 8 Logic

5. **MULTICULTURAL/LIVING SKILLS** – Three (3) units required, from either area. Courses in the Multicultural/Living Skills GE area prepare students to live and work in an increasingly multicultural environment or encourage development as integrated physiological, social and psychological beings. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other perspectives as well as their similarities and differences, or will be able to identify healthy patterns of physical or academic or social or emotional or financial behavior and apply their knowledge and skills to assess these patterns and make recommendations for altering them, or will be able to develop the criteria for personal or professional success in a given area and then create a specific action plan that targets the criteria—along with a timeline for accountability and evaluation.

### MULTICULTURAL COURSES:
- ANTH 2 Cultural Anth*
- ANTH 14 Relig/Myth/ Ritual*
- ANTH 25 Culture/NA Ind*
- ART 4 World Art*
- CMST 20 Intercultural Comm.*
- ENGL 10A/B World Lit*

### LIVING SKILLS:
- AGNR 1 Env. Ethics
- BUAD 10 Intro/ Business
- BUAD 45 Hum./ Rel. Job
- ECE 1 Human Develop.
- ECE 2 Child/Family/Comm
- ECE 9 Child Growth & Dev.
- FSS 16 Marriage / Family
- FSS 18 Adulthood/Aging

### Other Courses:
- CIS 63 Assembler Lang.
- CIS 62 Java Programming
- CIS 61 C++ Lang Programming
- CIS 60 Visual Basic Programming
- PHIL 8 Logic

6. **MULTICULTURAL REQUIREMENT** – Three (3) units required. (Note: A course in this area may be double-counted to also satisfy one of the other areas numbered 1-5. Courses which can be double-counted are marked with an asterisk.) - Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other perspectives as well as their similarities and differences.

### Other Courses:
- MATH 11 Pat of Math
- MATH 9 Survey of Calculus
- MATH 8 Finite Mathematics
- MATH 2 Precalculus
- MATH 3AB Calculus
- MATH 10 Trigonometry
- MATH 11 Patterns of Math
- MATH 13 College Algebra
- MATH 14 Statistics
- MATH 17 Calculus App Soc/Life Sci
- MATH 41AB Conc./Elem Math

7. **COMPUTER LITERACY REQUIREMENT**

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

- CIS 1 Computer Literacy with a grade of C or better.
- AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better.
- Four units to include the coursework options listed below with a grade of C or better:
  - CIS 70 (Windows); and
  - CIS 80 (Internet Basics); and
  - OAS 51 (Introduction to Keyboarding and Word); and
  - One additional course from: CIS 20 (Access), OAS 10 (Excel), 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.
- Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
- Possess ICDL 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 Emphasis

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, mechanical equipment, 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, 53, 54
- AGHE 22, 23, 26, 27, 28, 29, 31, 31.1, 31.2, 31.3, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 60, 70, 71, 72, 75,
- AGEO 12, 13, 14, 21, 109, 110, 111, 112, 113, 114, 115
- AGMA 42, 44
- AGNR 1, 4, 6, 8, 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
- AGVETT 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 9-15 units from the following:
- BUAD 6, 8, 10, 12, 15, 40, 41, 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 83, 173, 174, 176
- LEGL 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 53, 55, 56, 58

Choose 0-6 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, and computer and information 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:
- CIV 1, 2, 3, 4, 6, 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 10, 11, 12, 30, 31, 51, 52, 53, 58, 63, 64, 80, 84, 91, 90, 92, 93, 94, 112, 113, 114, 150, 152, 157, 158, 160, 166, 171

Select 0 – 6 additional units:
- ACCT 101, 102, 103, 104
- BUAD 10, 45, 66, 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 14.5 units from the list below:
- BIDL 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 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/Squad Boss levels, 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 12.5 units from the list below:
- ADJU 42
- CMST maximum of 3 units
- FIRS 113
- FTWO 115
- LEGL 55
- PHIL maximum of 3 units
- PSYC 14

NOTE: Student may use a maximum of 3 units from the BUAD courses that are listed below to satisfy the 12.5 units.
- 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 Rescue Systems 1

And select 16.5 units from the list below:
- FIRS 79, 85, 87, 145, 146, 147, 149
- FAID 132, 175

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 9.5 units from the list below:
- CHEM maximum of 3 units
- FTWL 101, 103
- FTWO 152, 157, 162
- FTWP 110, 123, 126
- MATH maximum of 3 units at or above the MATH 102 level
- PHYS maximum of 3 units
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 Plan Section of 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
- 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
- DSS
- HOSP
- ACCT
- BUAD
- CAS
- CIS
- OAS

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:
- DAN (activity)*
- FAID
- FSS
- HLTH
- HEOC
- OAS
- PE (activity)*
- PEAT (activity)*
- VOCN

*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
- DAN
- ENGL
- FREN
- GERM
- HUM
- JAPN
- JOUR
- MUS
- PHIL
- RUSS
- SL
- 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:
- AGMA
- AUTO
- CONS
- ENGR
- PHIL
- SL
- SPAN
- 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 English language, literature, and world languages.

Select 18 units from at least two areas:
- CMST
- ENGL
- FREN
- GERM
- JAPN
- RUSS
- SPAN
- SL
- JOUR
In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.

### 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
- ANAT 1
- ASTR 1, 5, 6
- BIOL 1, 5, 6, 10, 11, 12, 14, 15, 30
- BOT 1, 50, 52
- CHEM 1A, 1B, 2A, 2B, 6, 10, 11, 16, 26, 70, 70A, 71, 71A, 27, 32, 33, 34, 35, 36, 37, 38, 42, 43, 44, 45, 46
- ESCI 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 23, 26, 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
- 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, 5, 14, 25
- ARCH 3, 4, 5
- ECE 1, 2, 9
- ECON 1A, 1B, 2, 17
- FSS 16, 18
- GEOG 1A, 1B, 2A, 2B, 5, 7, 8, 11
- HIST 1A, 1B, 2, 3, 17A, 17B, 25, 35, 36, 38, 40, 55, 57
- POLS 1, 2, 12, 20, 25
- PSYC 1A, 5, 14, 15, 16, 17, 20, 41, 46
- SOC 1, 2, 15, 22, 25, 70

3/16/11
## Shasta College 2011-2012
California State University - General Education

Shasta College students will meet the General Education requirements for all campuses of the California State University system by completing the following General Education Program. Shasta College may certify a maximum of 39 semester units from Categories A - E. Note: No more than 30 semester units may be certified from Categories B - D. Courses listed more than once may be used to fulfill the requirements of one category only.

An additional 9 units of upper division work must be taken at a CSU campus to complete the full 48-unit General Education requirement.

### CATEGORY A
Students shall select a minimum of nine (9) units in communications in the English language. **Students must select one course from each area.**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>CMST 10: Interpersonal Communication</td>
<td>ENGL 1A: College Composition</td>
<td>CMST 60: Public Speaking</td>
</tr>
<tr>
<td>CMST 54: Small Group Communication</td>
<td>PHIL 8: Logic</td>
<td>CMST 40: Argumentation and Debate</td>
</tr>
<tr>
<td>CMST 60: Public Speaking</td>
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</tr>
</tbody>
</table>

### CATEGORY B
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

<table>
<thead>
<tr>
<th>ASTR 1: Astronomy</th>
<th>AGPS 24: Soils</th>
<th>CHEM 1A: General Chemistry</th>
<th>CHEM 1B: General Chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPS 24: Soils</td>
<td>ESCI 6: Ancient Life</td>
<td>ESCI 7: Intro to Geology of California</td>
<td>ESCI 8: Planetary Geology</td>
</tr>
<tr>
<td>ANTH 1: Physical Anthropology</td>
<td>BOT 1: General Botany</td>
<td>PHIL 8: Logic</td>
<td></td>
</tr>
<tr>
<td>BIOL 14: Heredity</td>
<td>ESCI 1: Physical Geology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESPI 12: Field Biology</td>
<td>ESCI 7: Intro to Geology of California</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZOOL 1: General Zoology</td>
<td>ESPI 8: Planetary Geology</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### B2/B3: Life Sciences

| AGAS 19: Principles of Animal Science | AGPS 24: Soils                      | CHEM 1A: General Chemistry         | CHEM 1B: General Chemistry         |
| AGNR 60: Environmental Science      | ESCI 5: Introduction to Geology     | ESCI 6: Ancient Life                | ESCI 7: Intro to Geology of California|
| ANAT 1: Human Anatomy               | PHYS 1: Physiology                  |                                   |                                    |
| BIOL 1: Principles of Biology       | physical anthropology               |                                   |                                    |
| BIOL 5: Human Biology               | BIOL 14: Heredity                   |                                   |                                    |
| BIOL 6: Human Biology               | ZOOL 1: General Zoology             |                                   |                                    |
| BIOL 10: General Biology            |                                   |                                   |                                    |
| BIOL 11: Diversity of Life          |                                   |                                   |                                    |
| BIOL 12: Field Biology              |                                   |                                   |                                    |
| BIOL 15: Entomology                 |                                   |                                   |                                    |
| ANTH 1: Physical Anthropology       |                                   |                                   |                                    |
| BIOL 14: Heredity                   |                                   |                                   |                                    |
| BOT 1: General Botany               |                                   |                                   |                                    |
| BIOL 15: Entomology                 |                                   |                                   |                                    |
| ESPI 1: Geology, Historical          |                                   |                                   |                                    |
| BOT 1: General Botany               |                                   |                                   |                                    |
| ESPI 7: Intro to Geology of California|                                   |                                   |                                    |
| PHIL 8: Logic                       |                                   |                                   |                                    |
| ESPI 8: Planetary Geology           |                                   |                                   |                                    |
| PHYS 1: Physiology                  |                                   |                                   |                                    |
| ESPI 12: Field Biology              |                                   |                                   |                                    |
| ZOOL 1: General Zoology             |                                   |                                   |                                    |

#### B4: Mathematical Concepts and Quantitative Reasoning

| MATH 3A, 3B, 4A: Calculus            | MATH 9: Survey of Calculus         | MATH 10: Plane Trigonometry        | MATH 11: Patterns of Mathematical Thought |
| MATH 3A, 3B, 4A: Calculus            | MATH 9: Survey of Calculus         | MATH 10: Plane Trigonometry        | MATH 11: Patterns of Mathematical Thought |
| MATH 4B: Differential Equations      | MATH 10: Plane Trigonometry        | MATH 11: Patterns of Mathematical Thought | MATH 17: Calculus App. Soc & Life Sciences |
| MATH 4B: Differential Equations      | MATH 10: Plane Trigonometry        | MATH 11: Patterns of Mathematical Thought | MATH 17: Calculus App. Soc & Life Sciences |
| MATH 8: Finite Mathematics           | MATH 14: Introduction to Statistics |                                   |                                    |

### CATEGORY C
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.**

<table>
<thead>
<tr>
<th>C1: Arts</th>
<th>C2: Humanities</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1: Introduction to Art</td>
<td>CHIN 1: Mandarin Chinese</td>
</tr>
<tr>
<td>ART 2, 3: History of Western Art</td>
<td>*ENGL 24: Multicultural American Lit.</td>
</tr>
<tr>
<td>ART 2, 3: History of Western Art</td>
<td>ENGLISH 1B: Literature &amp; Composition</td>
</tr>
<tr>
<td>ART 4: World Art</td>
<td>ENGLISH 10A: World Literature to 1500</td>
</tr>
<tr>
<td>ART 6: History of Modern Art</td>
<td>**ENGL 10B: World Literature after 1500</td>
</tr>
<tr>
<td>CMST 30: Oral Interpretation</td>
<td>ENGLISH 11A, 11B: Courses listed on American Lit.</td>
</tr>
<tr>
<td></td>
<td>ENGLISH 11A, 11B: Courses listed on American Lit.</td>
</tr>
<tr>
<td></td>
<td>ENGLISH 12: Intro to Short Fiction</td>
</tr>
<tr>
<td></td>
<td>ENGLISH 13A, 13B: Survey of English Lit.</td>
</tr>
<tr>
<td></td>
<td>ENGLISH 14: Drama as Lit</td>
</tr>
<tr>
<td></td>
<td>ENGLISH 15: Intro. to Lit. By/About Women</td>
</tr>
<tr>
<td></td>
<td>ENGLISH 16: Poetry of the Humanities</td>
</tr>
<tr>
<td></td>
<td>ENGLISH 17: Intro to Shakespeare</td>
</tr>
<tr>
<td></td>
<td>*ENGLISH 18: African American Lit</td>
</tr>
<tr>
<td></td>
<td>ENGLISH 19: Survey of Bible as Literature</td>
</tr>
<tr>
<td></td>
<td>**ENGLISH 20: World Mythology</td>
</tr>
<tr>
<td></td>
<td>**ENGLISH 21: World Mythology</td>
</tr>
</tbody>
</table>

### CATEGORY D

<table>
<thead>
<tr>
<th>D1: Written Communication</th>
<th>D2: Oral Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1B: Literature &amp; Composition</td>
<td>CMST 10: Interpersonal Communication</td>
</tr>
<tr>
<td>ENGL 1C: Crit. Reasoning/Reading/Writing</td>
<td>CMST 54: Small Group Communication</td>
</tr>
<tr>
<td>ENGL 1C: Crit. Reasoning/Reading/Writing</td>
<td>CMST 60: Public Speaking</td>
</tr>
</tbody>
</table>

### CATEGORY E

<table>
<thead>
<tr>
<th>E1: Critical Thinking</th>
<th>E2: Oral Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1B: Literature &amp; Composition</td>
<td>CMST 10: Interpersonal Communication</td>
</tr>
<tr>
<td>ENGL 1C: Crit. Reasoning/Reading/Writing</td>
<td>CMST 54: Small Group Communication</td>
</tr>
</tbody>
</table>

Updated 4/6/11 Change indicated in red
Shasta College 2011-12 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

**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 5**: Digital Plant  
**GEOG 8**: World Regional Geography  
**GEOG 7**: California 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 2**: Child, Family, Community  
**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 Wellness  
**HLTH 2**: Nutrition and Fitness  
**HLTH 3**: Substance Abuse Awareness  
**PSYC 1A**: General Psychology  
**PSYC 14**: Understanding Human Behavior  
**PSYC 15**: Social Psychology  
**PSYC 16**: Health Psychology  
**PSYC 17**: Abnormal Psychology  
**PSYC 20**: Cross-Cultural Psychology  
**PSYC 18**: Life Management  
**PSYC 25**: Sociology of Minorities  
**PSYC 41**: Cultural/Soc Context of Childhood  
**PSYC 5**: Human Sexuality  
**STU 1**: College Success

**D8: Political Science, Government, and Legal Institutions**  
**ADJU 10**: Intro to AOJ  
**AGPS 25**: California Water  
**AGPS 25**: California Water  
**CMST 20**: Intercultural Communication  
**ECE 1**: Human Development  
**ECE 9**: Child Growth & Development  
**JOUR 21**: Intro. to Mass Communications  
**POLS 2**: Intro. to Amer. Government  
**POLS 12**: CA State and Local Government  
**POLS 20**: Politics of the Developing World  
**POLS 25**: Global Politics

**D9: Psychology**  
**PSYC 1A**: General Psychology  
**PSYC 14**: Understanding Human Behavior  
**PSYC 15**: Social Psychology  
**PSYC 16**: Health Psychology  
**PSYC 17**: Abnormal Psychology  
**PSYC 20**: Cross-Cultural Psychology  
**PSYC 41**: Cultural/Soc Context of Childhood  
**PSYC 5**: Human Sexuality  
**PSYC 7**: California Geography

**D10: Sociology and Criminology**  
**GERO 75**: Death & Dying  
**SOC 2**: Social Problems  
**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 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  
**EC 1**: Human Development  
**EC 2**: Child, Family, Community  
**EC 9**: Child Growth & Development  
**FSS 18**: Marriage and Family  
**FSS 18**: Marriage and Family  
**FSS 25**: Nutrition  
**FSS 60**: Life Management  
**GERO 75**: Death & Dying  
**HLTH 1**: Health Wellness  
**HLTH 2**: Nutrition and Fitness  
**HLTH 3**: Substance Abuse Awareness  
**PSYC 1A**: General Psychology  
**PSYC 5**: Human Sexuality  
**PSYC 14**: Understanding Human Behavior  
**PSYC 18**: Life Management  
**PSYC 20**: Cross-Cultural Psychology  
**PSYC 41**: Cultural/Soc Context of Childhood  
**PSYC 46**: Human Memory and Learning  
**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, GEOG 7, HIST 25, HIST 35, PSYC 20, PSYC 41, SOC 25.

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, POLS 20.

This is the approved list for courses taken Fall 2011 through Summer 2012. See [www.assist.org](http://www.assist.org) for prior years.
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>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1A: College Composition</td>
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</tbody>
</table>

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

**FOR CSU ONLY:**

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

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

| MATH 2: Pre-Calculus                                    |
| MATH 3A: Calculus+                                      |
| MATH 3B: Calculus                                       |
| MATH 4A/4B: Calculus/Diff. Equations                    |
| MATH 6: Linear Algebra                                  |
| MATH 8: Finite Math                                     |
| MATH 9: Survey of Calculus+                             |
| MATH 10: Music Appreciation                             |
| 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                           |
| MUS 10: Music Appreciation                             |
| MUS 11: History of Jazz and Rock                       |
| MUS 14: World Music                                    |
| THTR 1: Introduction to Theatre+                       |
| THTR 5: 20th Century Theatre                           |
| THTR 8.9: Theatre Appreciation I,II                    |

**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. By 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                        |
| 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 Right/Wrong                  |
| PHIL 10: Life and Death Moral Issues                   |
| RUSS 2: Elementary Russian                            |
| RUSS 3: Intermediate Russian                           |
| RUSS 4: Intermediate Russian                           |
| SL 92: American Sign Language II                       |
| SL 94: American Sign Language III                      |
| SL 96: American Sign Language IV                       |

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

| ANTH 2: Cultural Anthropology                          |
| ANTH 5: Humanity, Culture and Ecology                  |
| ANTH 14: Religion, Myth, and Ritual                    |
| ANTH 25: Cult/Hist of N. Amer. Indian+                 |
| ARCH 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                   |
| ECON 17: Economic History of the U.S.                  |
| GEOG 1A: Physical Geog                                 |
| GEOG 1B: Cultural Geography                            |
| GEOG 7: California Geography                           |
| GEOG 8: World Geography                                |
| ANTH 1A: History of Western Civilization               |
| ANTH 1B: History of Western Civilization               |
| HIST 2: World Civilization to 1500 C.E.               |
| HIST 3: World Civilization 1500 to Present            |
| HIST 17A: U.S. History and Government                  |
| HIST 25: African American History                      |
| HIST 35: History of Mexican Americans                 |
| HIST 36: History of the Far East                       |
| HIST 38: History of World Religions                    |
| HIST 40: History & Government of CA                    |
| HIST 55: 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-Childhood               |
| 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                           |
| POLS 1: Intro. to Political Science                   |
| POLS 2: Intro. to American Government                 |
| POLS 12: Calif. State/Local Government                |
| POLS 20: Politics of the Developing World             |
| POLS 25: Global Politics                              |

+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 Envr
- CHEM 10: Chemistry for Liberal Arts+
- CHEM 11: Chemistry Lab/Liberal Arts+
- CHEM 16: Chemical Problem Solving
- CHEM 70, 71: Organic Chemistry
- ESCI 1: Historical Geology
- 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 15: Oceanography
- GEOG 1A: Physical Geography
- PHSC 1: Physical Science Survey+
- PHYS 2A: General College Physics+
- PHYS 2B: General College Physics+
- PHYS 4A: Physics Mechanics+

BIOLOGICAL SCIENCES:
- AGNR 60: Environmental Science
- AGNR 61: Environmental Science Lab
- AGPS 20: Plant Science
- ANAT 1: Human Anatomy
- ANTH 1: Physical Anthropology
- BIOL 1: Principles of Biology
- 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)
- MICR 1: Microbiology
- NHIS 15: Natural History
- PHY 1: Physiology
- ZOOL 1: General Zoology
- JAPN 1: Elementary Japanese
- GERMe 1: Elementary German
- SPAN 1: Elementary Spanish
- SL 90: American Sign Language I
- CHIN 1: Mandarin Chinese
- FREN 1: Elementary French
- RUSS 1: Elementary Russian
- ANTH 1: Physical Anthropology
- BIOL 1: Principles of Biology
- BOT 1: General Botany

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
- JAPN 1: Elementary Japanese
- GERMe 1: Elementary German
- SL 90: American Sign Language I
- FREN 1: Elementary French
- RUSS 1: Elementary Russian
- SPAN 1: Elementary Spanish
- ANTH 1: Physical Anthropology
- BIOL 1: Principles of Biology
- BOT 1: General Botany

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 2011 through Summer 2012. See www.assist.org for prior years.
OPTION 1: IGETC (Intersegmental General Education Transfer Curriculum)

- Complete the 33 – 37 unit IGETC pattern.
- Complete all IGETC courses with a grade of “C” or better.
- 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)
- 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)

- Complete the 39-unit CSU GE pattern.
- Complete Communication, English, Critical Thinking, and Math requirements (Area A1, A2, A3 and B4) each with a grade of “C” or better.
- 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.
- Complete additional courses from an emphasis to meet the lower division requirements in your major and then electives to reach 60 units.
- 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:

<table>
<thead>
<tr>
<th>Area</th>
<th>Course ID</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Oral Communication</td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>English 1A</td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td>Science course</td>
<td></td>
</tr>
<tr>
<td>B4</td>
<td>Transfer-level math course</td>
<td></td>
</tr>
<tr>
<td>C1 or C2</td>
<td>Arts or Humanities</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Social, Political and Economic institutions, and Behavior</td>
<td></td>
</tr>
<tr>
<td>Multi-cultural course</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Note: Any student completing the IGETC or CSU General Education requirements with the inclusion of a multicultural course will also have met the general education requirements for the Shasta College associate degree.

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):
    - AGAS 51: Agriculture Accounting
    - AGAS 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, 40, 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, 68, 67, 69, 70, 83, 94, 97;
    - AGPS 25; AGSA 50, 56; AGVET 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: Physiology

- **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:
- **BIOL 1** Principles of Biology
- **BOT 1** General Botany
- **ZOOI 1** General Zoology
- **CHEM 1A** General Chemistry
- **CHEM 1B** General Chemistry

### 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:
- **ACCT 2** Financial Accounting
- **ACCT 4** Managerial Accounting
- **ECON 1A** Principles of Microeconomics
- **ECON 1B** Principles of Macroeconomics

Select 6 units:
- **MATH** 8, 9, 3A, 14
- **BUAD** 6, 10
- **CIS** 1

### 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:
- **ECE 1** Human Development OR
- **ECE 9** Child Growth and Development
- **ECE 2** Child, Family, and Community
- **ECE 7** Early Childhood Observation and Assessment
- **ECE 15** Child Health, Safety and Nutrition

Choose 6 additional units from the following:
- **ECE** 8, 17, 20, 26, 52

### 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:
- **ADJU 10** Intro to Administration of Justice
- **ADJU 15** Concepts of Criminal Law

Select 12 additional transferable units:
- **ADJU** 11, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 30, 40, 41, 42
- **MATH** 14
- **PSYC** 1A
- **SOC** 1, 2
- **LEGL** 39, 40

### 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 Sciences). 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:
- **ESCI 17** Earth System Science

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):
- **AGNR** 60
- **ASTR** 1
- **BIOL** 1, 10
- **ESCI** 1, 14, 15, 18

Select the remaining transferable units from the following courses:
- Related Science courses:
  - **BIOL** 11, 12
  - **CHEM** 1B
  - **ESCI** 2, 6, 10
  - **NHIS 15** Natural History
  - **PHYS 2B** General College Physics

- Courses from supporting disciplines:
  - **AGNR** 1
  - **AGNR** 83
  - **CIS** 1
  - **GIS** 1, 10, 22
  - **MATH** 38, 14

### 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:
- **MATH 3A** Calculus
- **MATH 3B** Calculus
- **MATH 4A** Calculus
- **PHYS 4A** Physics (Mechanics)
- **PHYS 4B** Physics (Electricity and Magnetism)

Select 6 units:
- **CHEM 1A, ENGR 17, 35, 45, CIS 61, MATH 4B or PHYS 4C**

General Education units are modified for this major.

### 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:
- **ESCI 1** Physical Geology
- **ESCI 2 or 6** Historical Geology or Ancient Life

And select one combination of the following Earth Science field courses to total 3 units:
- (Field courses include ESCI 26,27,32,33,34,35,36,37,38,42,43,44,45 and 46)

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**
  - **ESCI** 3, 4, 7, 9, 10, 11, 23

  Courses from supporting disciplines:
  - **AGNR** 1, 60, 83
  - **CHEM** 1B
  - **CIS** 1
  - **GIS** 1, 10, 22
  - **MATH** 38, 14
  - **NHIS** 15
  - **PHYS** 2B

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
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 Language** (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 Language**:
  - **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
- **HUM** 2 Exploring the Humanities
- **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
- **EGTE** 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** 14 Meteorology
- **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
- **GIS** 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 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** 18, 5, 7, 8
- **HIST** 25, 35, 36, 38
- **POLIS** 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
- **ZOOL** 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 15, 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 Education (0835) – 18 units
The Physical Education emphasis is designed to provide lower division major courses to transfer to a university and pursue baccalaureate degrees in Physical Education – teaching, kinesiology, and pre-physical therapy.

Select 18 transferable units from at least 3 areas:
ANAT 1
CHEM 1A, 1B, 2A, 2B
FSS 25
HLTH 1, 2, 3, 10
MATH 14 or 2
PE 4, 6, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22, 23, 26, 27, 30, 31, 32, 33, 35, 36, 37, 39, 39, 51, 60, 62, 69, 70, 71, 72, 73, 74, 75
PEAT 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 29, 30, 31
PHY 1
PHYS 2A, 2B
PSYC 1A

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, 8, 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, 4
ECE 1, 2, 9
ECON 1A, 1B, 2, 17
MATH 14
POIS 1 or 25
PSYC 1A
SOC 1

Select the remaining 12 units from the following list:
ANTH 1, 2, 14, 25
ARCH 3, 4
ECE 1, 2, 9
ECON 1A, 1B, 2, 17
FSS 16, 18
HIST 1A, 1B, 5, 7, 8
MATH 14
POIS 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, 92, 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
RUSS 1, 2, 3, 4
SL 90, 91, 92, 93, 94, 96
SPAN 1, 2, 3, 4, 19, 20

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

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
**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 Code</th>
<th>Course Title</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 166</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Math</td>
<td>3</td>
</tr>
<tr>
<td>OAS 10</td>
<td>Excel for Windows-I</td>
<td>1</td>
</tr>
<tr>
<td>OAS 51</td>
<td>Introduction to Keyboarding and Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>OAS 64</td>
<td>Computerized Ten-Key</td>
<td>.5</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 II, 144 hours offered 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 Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ADJU 10</td>
<td>Introduction to Administration 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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 11</td>
<td>Traffic Control and Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 21</td>
<td>Police Field Operations</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 22</td>
<td>Juvenile Procedures</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.

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<tr>
<td>Major</td>
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<tr>
<td>Additional General Education</td>
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<td>General Electives</td>
<td>12</td>
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<tr>
<td><strong>Degree Total</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

**Agriculture – Agriculture 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. "Agrl" 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 field to seed and 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 solid 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.

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 1</td>
<td>Career Planning for Agriculture</td>
<td>2</td>
</tr>
<tr>
<td>AG 6</td>
<td>Career Placement – Ag and Natural Resources</td>
<td>1</td>
</tr>
<tr>
<td>AG 9</td>
<td>Agriculture and Natural Resources Leadership</td>
<td>1</td>
</tr>
<tr>
<td>AG 94</td>
<td>Worksite Learning-Agriculture OR Student Enterprise Projects</td>
<td>1</td>
</tr>
<tr>
<td>AG 53</td>
<td>Introduction to Agriculture Business</td>
<td>3</td>
</tr>
<tr>
<td>AGAS 11</td>
<td>Livestock Feeding and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>AGAS 19*</td>
<td>Animal Science</td>
<td>3</td>
</tr>
<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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGAB 51</td>
<td>Agriculture Accounting</td>
<td>3</td>
</tr>
<tr>
<td>AGAB 54*</td>
<td>Agriculture Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1B*</td>
<td>Principles of Economics</td>
<td>OR</td>
</tr>
<tr>
<td>BUAD 76</td>
<td>Sales</td>
<td>OR</td>
</tr>
<tr>
<td>BUAD 77</td>
<td>Principles of Marketing</td>
<td>OR</td>
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</tbody>
</table>

**Additional General Education Required for A.S. Degree**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 76</td>
<td>Sales</td>
<td>3</td>
</tr>
<tr>
<td>AGAB 54*</td>
<td>Agriculture Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1B*</td>
<td>Principles of Economics</td>
<td>OR</td>
</tr>
</tbody>
</table>

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

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>Major</td>
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<td>General Electives</td>
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<tr>
<td><strong>Degree Total</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

1. Students planning to transfer to a college or university should consult a counselor or Agriculture faculty regarding transfer requirements.
2. Sixty (60) units are required for the AS Degree. All graduation requirements are met.
Agriculture – Environmental Horticulture Transfer Degree

Also see Agriculture-Horticulture for other Degree/Certificates

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:
- AG 6 Career Placement – Ag and Natural Resources 1
- AGHE 22 Nursery Practices and Plant Propagation 2
- AGHE 23 Nursery Practices and Management 2
- AGHE 27, 28 & 29 Plant Identification and Taxonomy 3
- AGHE 31 Landscape Irrigation 3
- AGHE 33 Environmental Horticulture OR 3
- AGPS 20 Plant Science 3
- AGHE 35 Landscape Design 3
- AGHE 37 Nursery and Florist Management OR 3
- AGAB 54 Agriculture Economics 3
- AGH 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 1A Introduction to Statistics 4
- 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:

Major 54
Additional General Education 3
General Electives 2
Degree Total 60*

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Agriculture-Equine Science

This curriculum is designed to provide training in a wide variety of jobs available in the Equine industry, jobs including horse training, horse grooming and care, horse packing, stable management, and other. Classes for this major will mainly be offered during the evening program. Students interested in this major should secure a worksite position early in the program to confirm their desire for working in this industry as well as gaining practical experience.

Students planning to transfer to a college or university should consult a Counselor or Agriculture Faculty Advisor regarding transfer requirements.

TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS.

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. Sixty (60) units are required for an A.S. degree. All graduation requirements are met.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

CORE COURSES:
- AG 1 Career Planning for Agriculture 2
- AG 6 Career Placement – Ag and Natural Resources 1
- AG 9 Agriculture and Natural Resources Leadership 1
- AG 94 Worksite Learning 3
- AGAB 51 Agriculture Accounting 3

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
**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 Landscape Protection 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

**Major 40**

**Additional General Education 18**

**General Electives 2**

**Degree Total 60**

*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>Additional General Education</td>
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<td>General Electives</td>
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<tr>
<td><strong>Degree Total</strong></td>
<td><strong>60</strong></td>
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</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

**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 exceed $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 outnumber 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 arrangement; 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 landscaping. 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.

Continued
REQUIREMENTS FOR CERTIFICATE:

AGEH 34  Beginning floral Design – Fall Flowers  2
AGEH 36  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  Designing Floral Arrangements  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  3
AGEH 23  Nursery Practices & Management  3
AGEH 27, 28, 29  Plant Identification and Taxonomy  3
AGEH 97  Special Topics in Environmental Horticulture  3
BUAD 45  Human Relations on the Job  1

In addition, students must complete one of the following:
AGEH 38  Landscape and Turf Management  3
AGEH 94  Horticulture Worksite Learning  1-4
AGMA 44  Intro. to Const. Skills for Ag. and Natural Res.  3

TOTAL UNITS FOR CERTIFICATE:  13-16

*These courses also count towards the Watershed Restoration Certificate.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Agriculture – Sustainable Agriculture Science

The Sustainable Agriculture Science Degree at Shasta College provides training for farming, ranching, 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, agricultural 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.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

CORE COURSES:
AG 1 Career Planning for Agriculture 2
AG 6 Career Placement – Ag and Natural Resources 1
AG 9 Agriculture and Natural Resources Leadership 1
AG 94 Worksite Learning OR 1
AG 58 Student Enterprise Projects 1

AGAB 53 Introduction to Agriculture Business 3
AGAS 30 Livestock Production (3)
AG 11 Livestock Feeding and Nutrition 3
AGAS 19* Principles of Animal Science 3
AGMA 44 Intro. to Cons. Skills for Ag and Natural Resources 3
AGPS 20* Plant Science 4
AGPS 24* Soils 3
AGSA 56 Intro. to Sustainable Ag and Farm Management 3

OPTION 1 – General Agriculture Science Concentration
(Choose eight units):
AG 51 Agriculture Accounting (3)
AG 54* Agriculture Economics (3)
AGMA 42 Farm Power and Machinery (3)
CHEM 2A* Introduction to Chemistry (required) (5)
CHEM 2B* Introduction to Organic and Biochemistry (5)
CONS 46 Equipment Operations and Maintenance (3)

OPTION 2 – Agriculture Education Concentration (Choose nine units)
AGAS 30 Livestock Production (3)
AGEH 22 Nursery Practices and Plant Propagation (2)
AGEH 23 Nursery Practices and Management (2)
AGEH 26 Integrated Pest Management in Environmental Hort. (3)
AGEQ 13 Horse Husbandry (3) OR
AGEQ 21 Horse Management (3)
AGMA 42 Farm Power and Machinery (3)
CONS 46 Equipment Operations and Maintenance (3)
WELD 73 Structural Steel Metal Fabrication (3)

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
AGNR 4 Introduction to Range Science (3)
AGNR 12 Environmental Policy and Law (2)
AGNR 64* Watershed Management and Ecology (3)
AGNR 65 Forest Ecology (3)
AGNR 70 Wildlife Conservation and Management (3)

(Area 2) FARM AND RANCH MANAGEMENT CURRICULUM
AGAB 51 Agriculture Accounting (3)
AGAS 30 Livestock Production (3)
AGEH 26 Integrated Pest Management in Envr.Hort. (3)
AGEH 31 Landscape Irrigation (3) OR
AGPS 25* California Water (3)

AGEH 33* Environmental Horticulture (3)
AGEQ 21 Horse Management (3)
AGMA 42 Farm Power and Machinery (3)
AGVIT 80 Vineyard Design and Construction (1)
AGVIT 81 Vineyard Care (1)
WELD 73 Structural Steel Metal Fabrication (3)

Additional General Education Required for A.S. Degree:
ENGL 1A* College Composition (4)
CMST 60* Public Speaking (3) OR
CMST 54* Small Group Communication (3)
MATH 102* Intermediate Algebra (5) OR
MATH 13* College Algebra (3) OR
MATH 14* Introduction to Statistics (4)

Computer Literacy test OR
AGNR 52 Computers for Agriculture and Natural Resources (3)

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

COMMUNITY COLLEGE OF THE CASCADIAN REGION

PAGE 38  Chapter 5 – Degrees, Programs, and Certificates

Agriculture – Sustainable Agriculture Science (continued):

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Major</th>
<th>45-48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional General Education</td>
<td>9</td>
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<tr>
<td>General Electives</td>
<td>3-6</td>
</tr>
<tr>
<td>Degree Total</td>
<td>60*</td>
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</tbody>
</table>

Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

1. Students planning to transfer to a college or university should consult a counselor or Agriculture faculty regarding transfer 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: 1) 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:
AG 1 Career Planning for Agriculture 2
AG 6 Career Placement – Ag and Natural Resources 1
AG 94 Agriculture Worksite Learning 9
AGAS 19* Principles of Animal Science 3
AG 11 Livestock Feeding and Nutrition 3
AGAS 19* Principles of Animal Science 3
AGNR 52 Computers in Agriculture and Natural Resources 3
AGVETT 1 Vet. Anatomy, Physiology & Medical Terminology 4
AGVETT 2 Fundamentals of Animal Health Technology 4
AGVETT 3 Health and Disease of Animals 4
AGVETT 4 Veterinary Radiology and Imaging 4
AGVETT 5 Vet. Anesthesiology, Surgical Assist. and Dentistry 4
AGVETT 6 Care of Exotic and Laboratory Animals 1
AGVETT 7 Veterinary Medical Records 1
AGVETT 16 Veterinary Practices 2

CHEM 2A* Introduction to Chemistry (5) OR
CHEM 10* Chemistry for Liberal Arts (3)

Degree Total 60*

*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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<td>63-65*</td>
</tr>
</tbody>
</table>

Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

*Continued
This curriculum qualifies the student for the AA degree with a concentration in the Visual Arts. Transfer Art students should check course requirements with counselors or the 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:
ART 2* History of Western Art Through the Gothic Period 3
ART 3* History of Western Art Since 1400 3
ART 12 Beginning Form, Design and Color 3
ART 13 Intermediate Form, Design and Color 3
ART 21A Beginning Freehand Drawing 3
ART 21B Intermediate Freehand Drawing 3

ELECTIVE COURSES:
Choose nine (9) units from the courses listed below in 2-D or 3-D areas:
ART 15 Three Dimensional Design 3
ART 17 Shades, Shadows and Perspectives 3
ART 26 Beginning Watercolor 3
ART 27 Intermediate Watercolor 3
ART 29 Beginning Painting 3
ART 30 Intermediate Painting 3
ART 31 Beginning Figure Drawing 3
ART 32 Intermediate Figure Drawing 3
ART 35 Beginning Ceramics 3
ART 36 Intermediate Ceramics 3
ART 45 Beginning Glass 3
ART 46 Glass Blowing 3
ART 50 Printmaking 3
ART 55 Beginning Sculpture 3
ART 56 Intermediate Sculpture 3
ART 57 Sculptural Glass 3
ART 60A Basic Photography and Darkroom 3
ART 61 Beginning Creative Photography 3
ART 62 Intermediate Creative Photography 3
ART 70 Introduction to Digital Photography 3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Major 27
Additional General Education 27-33
General Electives 0-6
Degree Total 60

Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Automotive Technology Degree core courses (continued):
AUTO 147 Automotive Braking Systems 3
AUTO 161 Manual Drive Trains & Axles 3
AUTO 162 Automatic Transmissions and Transaxles 4
AUTO 163 Automotive Heating & Air Conditioning 3
ENGL 1A* College Composition 4
INDE 1 Career Planning for Industrial Technology 1
INDE 150 Introduction to Engine Machining 3
INDE 152 Engine Machining Laboratory 3
MATH 110* Essential Math 3

47

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

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:
Major 47
Additional General Education 15
General Electives 0
Degree Total 62*

Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

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

AUTO 1 Vehicle Electrical Systems 3
AUTO 10 Automotive Electronics 3
AUTO 20 Engine Performance 4
AUTO 21 Advanced Engine Performance 3
AUTO 94 Automotive Worksite Learning 2
AUTO 130 Automotive Steering & Suspension 3
AUTO 147 Automotive Braking Systems 3

TOTAL UNITS FOR CERTIFICATE 40

Automotive Technology – Automotive Chassis Certificate

REQUIREMENTS FOR CERTIFICATE:
AUTO 1 Vehicle Electrical Systems 3
AUTO 130 Automotive Steering & Suspension 3
AUTO 131 Automotive Wheel Alignment 2
AUTO 147 Automotive Braking Systems 3

TOTAL UNITS FOR CERTIFICATE 11

Automotive Technology – Automotive Electrical-Electronics

REQUIREMENTS FOR CERTIFICATE:
AUTO 1 Vehicle Electrical Systems 3
AUTO 10 Automotive Electronics 3

TOTAL UNITS FOR CERTIFICATE 6

Automotive Technology – Automotive Engine Performance

REQUIREMENTS FOR CERTIFICATE:
AUTO 1 Vehicle Electrical Systems 3
AUTO 10 Automotive Electronics 3
AUTO 20 Engine Performance 4
AUTO 21 Advanced Engine Performance 3

TOTAL UNITS FOR CERTIFICATE 13

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
**Business Administration – General Business Concentration**

This degree prepares you to enter the workforce or transfer to a four-year college or university. Career opportunities include entry-level marketing, management, entrepreneur, customer service representative and retail sales. All business requires individuals that have the skills covered in these courses. Explore career opportunities locally, statewide, and nationally. Many courses are offered during the day and evening at one of our extended education campuses, and online.

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

<table>
<thead>
<tr>
<th>CORE COURSES:</th>
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</thead>
<tbody>
<tr>
<td>ACCT 101 Basic Accounting I OR</td>
</tr>
<tr>
<td>ACCT 2 Introduction to Financial Accounting</td>
</tr>
<tr>
<td>BUAD 6 Business Law</td>
</tr>
<tr>
<td>BUAD 10 * Introduction to Business</td>
</tr>
<tr>
<td>BUAD 15 Business and Society</td>
</tr>
<tr>
<td>BUAD 46 * Human Relations on the Job</td>
</tr>
<tr>
<td>BUAD 66 * Business Communications</td>
</tr>
<tr>
<td>BUAD 91 Principles of Management OR</td>
</tr>
<tr>
<td>CIS 4 Business Data Communications</td>
</tr>
<tr>
<td>CIS 1 Computer literacy Workshop</td>
</tr>
<tr>
<td>REAL 30 Real Estate Principles</td>
</tr>
</tbody>
</table>

**RESTRICTED ELECTIVE COURSES:**

Choose seven (7) units from the following

<table>
<thead>
<tr>
<th>RESTRICTED ELECTIVE COURSES</th>
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<tbody>
<tr>
<td>ACCT 2 Introduction to Financial Accounting</td>
</tr>
<tr>
<td>ACCT 101 Basic Accounting I</td>
</tr>
<tr>
<td>ACCT 102 Basic Accounting II</td>
</tr>
<tr>
<td>BUAD 8 Business Law</td>
</tr>
<tr>
<td>BUAD 41 Supervision and Leadership</td>
</tr>
<tr>
<td>BUAD 47 Fundamentals of Nonprofit Management</td>
</tr>
<tr>
<td>BUAD 48 Grant Funding: Finding the Right Source</td>
</tr>
<tr>
<td>BUAD 49 Nonprofit Financial Management</td>
</tr>
<tr>
<td>BUAD 50 Marketing and Public Relations for Nonprofits</td>
</tr>
<tr>
<td>BUAD 51 Boards of Directors in Nonprofit Organizations</td>
</tr>
<tr>
<td>BUAD 52 Staff &amp; Volunteer management in Nonprofit Orgs</td>
</tr>
<tr>
<td>BUAD 53 Accountability Requirements for Nonprofit Orgs</td>
</tr>
<tr>
<td>BUAD 54 Nonprofit Policy, Advocacy &amp; Community Building</td>
</tr>
<tr>
<td>BUAD 71 Intro. to e-Commerce</td>
</tr>
<tr>
<td>BUAD 72 e-Commerce Marketing</td>
</tr>
<tr>
<td>BUAD 76 Sales</td>
</tr>
<tr>
<td>BUAD 77 Principles of Marketing</td>
</tr>
<tr>
<td>BUAD 106 Business Mathematics</td>
</tr>
<tr>
<td>OAS 51 Introduction to Key and Boarding</td>
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</table>

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

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

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<thead>
<tr>
<th>Major</th>
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<tr>
<td>General Electives</td>
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</tr>
<tr>
<td><strong>Degree Total</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

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**Business Administration – Management Concentration**

This degree prepares you to enter the workforce or transfer to a four-year college or university. This specialized degree includes courses emphasizing supervisory skills. Career opportunities include entry-level marketing, management, entrepreneur, customer service representative and retail sales. If you are aspiring towards a career in management, this is the degree for you. Explore career opportunities locally, statewide, and nationally. Many courses are offered during the day and evening at one of our extended education campuses, and online.

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

<table>
<thead>
<tr>
<th>CORE COURSES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101 Basic Accounting I OR</td>
</tr>
<tr>
<td>ACCT 2 Intro to Financial Accounting</td>
</tr>
<tr>
<td>BUAD 6 Business Law</td>
</tr>
<tr>
<td>BUAD 8 Business Law</td>
</tr>
<tr>
<td>BUAD 10 * Introduction to Business</td>
</tr>
<tr>
<td>BUAD 15 Business and Society</td>
</tr>
</tbody>
</table>

*Continued on next page
BUSINESS ADMINISTRATION – MANAGEMENT CONCENTRATION (continued):

- 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 3
- BUAD 72 e-Commerce Marketing 3
- BUAD 73 Sales 3
- BUAD 77 Principles of Marketing 3
- BUAD 91 Principles of Management 3
- CIS 1 Computer Literacy Workshop 3
- CIS/OAS Computer Applications 3

RESTRICTED ELECTIVE COURSES:

- BUAD 76 Sales 3
- BUAD 77 Principles of Marketing 3
- BUAD 91 Principles of Management 3
- CIS 1 Computer Literacy Workshop 3
- CIS/OAS Computer Applications 3

COMMUNICATION CLASSES provide students with skills that are essential for other classes and programs at Shasta College and beyond. The Communication Studies program teaches communication theory and competencies that are crucial for success in both personal and business relationships. Students learn analytical and critical thinking skills that are essential life skills. Good oral communication skills have been documented by research to be an important factor in the health of personal relationships, and these skills have even been linked to one's physical and psychological health. Communication courses enable students to lead richer, more satisfying and productive lives by improving their grasp of core theories and practical skills. The results are often immediate and dramatic, improving both personal and professional relationships in both large and small groups.

ASSOCIATE IN ARTS IN COMMUNICATION STUDIES FOR TRANSFER

REQUIREMENTS:

- Major 43
- Additional General Education 15
- General Electives 2
- Degree Total 60

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

Communication Studies

This curriculum qualifies the student for the AA degree with a major in Communication Studies. Communication classes provide students with skills that are essential for other classes and programs at Shasta College and beyond. Communication courses teach communication theory and competencies that are crucial for success in both personal and business relationships. Students learn analytical and critical thinking skills that are essential life skills. Good oral communication skills have been documented by research to be an important factor in the health of personal relationships, and these skills have even been linked to one's physical and psychological health. Communication courses enable students to lead richer, more satisfying and productive lives by improving their grasp of core theories and practical skills. The results are often immediate and dramatic, improving both personal and professional relationships in both large and small groups.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Students must complete the “CORE” courses listed below for their major.

- Major 24
- Additional General Education 12
- General Electives 24
- Degree Total 60

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

Continued
**Computer Aided Drafting (CAD) Technology**

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

This curriculum is designed to prepare the individual for employment as a Drafter with potential for more rapid advancement into design and other areas of specialization. If engineering transfer is a goal after receiving an A.S. degree, students participating in this program should contact the Division Office/Engineering Coordinator at 530-242-7754, or Counselor for pertinent information.

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1A</td>
<td>Measurements and Plane Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2</td>
<td>Career Planning/Engineering &amp; Engineering Tech.</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 20</td>
<td>Residential Design</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 21</td>
<td>Residential Design and Architectural Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 22</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 24</td>
<td>Descriptive Geometry</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 27</td>
<td>Map and Computer-Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 29</td>
<td>Computer-Aided Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 30</td>
<td>Intermediate Computer-Aided Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 31</td>
<td>Architectural Detailing</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 32</td>
<td>Adv. Civil Design Applications for CAD</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 33</td>
<td>Solid Modeling Computer-Aided Drafting</td>
<td>2</td>
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<tr>
<td>MATH 10^★</td>
<td>Plane Trigonometry</td>
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<tr>
<td>MATH 102^★</td>
<td>Intermediate Algebra</td>
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</table>

This course may be waived if student can demonstrate appropriate score on the Math Placement Exam or other multiple measures.

**RESTRICTED ELECTIVE COURSES:**

Choose three (3) units from the following:

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>AGNR 83</td>
<td>Introduction to Global Positioning Systems (GPS)</td>
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<tr>
<td>CONS 52</td>
<td>Residential Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CONS 178</td>
<td>Building Codes and Standards</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1B</td>
<td>Plane Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 25</td>
<td>Structural Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 26</td>
<td>Industrial Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 64</td>
<td>Engineering Materials Testing</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 94</td>
<td>Engineering Worksite Learning</td>
<td>1-4</td>
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<tr>
<td>ENGR 97</td>
<td>Special Topics</td>
<td>5-2</td>
</tr>
<tr>
<td>ENGR 98</td>
<td>Special Lab</td>
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<td>OAS 10</td>
<td>Excel for Windows-1</td>
<td>1</td>
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*May be used to fulfill General Education requirements. See a counselor.

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

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<tr>
<th>Requirement</th>
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<tbody>
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<tr>
<td>Additional General Education</td>
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<td>General Electives</td>
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</tr>
<tr>
<td><strong>Degree Total</strong></td>
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*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

**REQUIREMENTS FOR CERTIFICATE:**

This certificate is designed to give the student the basic skill-set they need to work in the field of computer-aided drafting. Students must complete the “CORE” with a C or better.

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1A</td>
<td>Measurements and Plane Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2</td>
<td>Career Planning/Engineering &amp; Engineering Tech.</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 20</td>
<td>Residential Design</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 21</td>
<td>Residential Design and Architectural Drawing</td>
<td>3</td>
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<tr>
<td>ENGR 22</td>
<td>Engineering Graphics</td>
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<tr>
<td>ENGR 24</td>
<td>Descriptive Geometry</td>
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<td>Map and Computer-Aided Drafting</td>
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<td>ENGR 29</td>
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<td>2</td>
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<tr>
<td>ENGR 30</td>
<td>Intermediate Computer-Aided Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 31</td>
<td>Architectural Detailing</td>
<td>2</td>
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<tr>
<td>ENGR 32</td>
<td>Adv. Civil Design Applications for CAD</td>
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<tr>
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<td>Solid Modeling Computer-Aided Drafting</td>
<td>2</td>
</tr>
<tr>
<td>MATH 10</td>
<td>Plane Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 102^★</td>
<td>Intermediate Algebra</td>
<td>5</td>
</tr>
</tbody>
</table>

This course may be waived if student can demonstrate appropriate score on the Math Placement Exam or other multiple measures.

**RESTRICTED ELECTIVE COURSES:**

Choose three (3) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGNR 83</td>
<td>Introduction to Global Positioning Systems (GPS)</td>
<td>1</td>
</tr>
<tr>
<td>CONS 52</td>
<td>Residential Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CONS 178</td>
<td>Building Codes and Standards</td>
<td>3</td>
</tr>
</tbody>
</table>

**Computer and Information Systems-Business Information Systems Concentration**

This degree combines the core business courses with courses in the Information Technology (IT) skills area. It prepares you to enter the workforce in an entry level IT related position with many public and private organizations, or to start your own IT related business. The degree also prepares you to transfer to a four-year institution and complete a bachelor’s degree in an IT related area.

**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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2</td>
<td>Introduction to Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 6</td>
<td>Business Law</td>
<td>3</td>
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<td>BUAD 10</td>
<td>Introduction to Business</td>
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<td>BUAD 15</td>
<td>Business and Society</td>
<td>3</td>
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<td>BUAD 45</td>
<td>Human Relations on the Job</td>
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<td>BUAD 66</td>
<td>Business Communications</td>
<td>3</td>
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<tr>
<td>BUAD 71</td>
<td>Introduction to e-Commerce</td>
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<tr>
<td>CIS 2</td>
<td>Introduction to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>CIS 20</td>
<td>Access for Windows-1 OR</td>
<td>1-3</td>
</tr>
<tr>
<td>CIS 23</td>
<td>Introduction to Database Management (3)</td>
<td>4</td>
</tr>
<tr>
<td>CIS 31</td>
<td>CISCO CCNA 1</td>
<td>3</td>
</tr>
<tr>
<td>CIS 60</td>
<td>Visual Basic Programming OR (3)</td>
<td>3-4</td>
</tr>
<tr>
<td>CIS 61</td>
<td>C++ Language Programming OR (3)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 62</td>
<td>Java Programming OR (3)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 63</td>
<td>Assembler Language Programming OR (4)</td>
<td>4</td>
</tr>
<tr>
<td>CIS 83</td>
<td>Web Design Using Dreamweaver</td>
<td>2</td>
</tr>
<tr>
<td>OAS 10</td>
<td>Excel for Windows – 1</td>
<td>1</td>
</tr>
<tr>
<td>OAS</td>
<td>Word Processing</td>
<td>1</td>
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</table>

**RESTRICTED ELECTIVE COURSES:**

Choose seven (7) units from the following:

<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 I</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 72</td>
<td>e-Commerce Marketing</td>
<td>1</td>
</tr>
<tr>
<td>BUAD 73</td>
<td>Web Design/e-Commerce</td>
<td>1</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>C 21</td>
<td>Access for Windows II</td>
<td>1</td>
</tr>
<tr>
<td>C 22</td>
<td>Access for Windows III</td>
<td>1</td>
</tr>
<tr>
<td>C 32</td>
<td>CISCO CCNA 2</td>
<td>3</td>
</tr>
<tr>
<td>C 50</td>
<td>Windows 7 – Configuration</td>
<td>3</td>
</tr>
<tr>
<td>C 51</td>
<td>Second Programming Language</td>
<td>3</td>
</tr>
<tr>
<td>C 60</td>
<td>(CIS 60, CIS 61, CIS 62, CIS 63, or CIS 64)</td>
<td>3-4</td>
</tr>
<tr>
<td>C 72</td>
<td>Fundamentals of Linux</td>
<td>3</td>
</tr>
<tr>
<td>C 79</td>
<td>Adv. Web Design Using Dreamweaver &amp; Adobe</td>
<td>2</td>
</tr>
<tr>
<td>C 86</td>
<td>HTML</td>
<td>3</td>
</tr>
<tr>
<td>C 90</td>
<td>A+ Certification Preparation/Cisco IT Essentials I</td>
<td>4</td>
</tr>
<tr>
<td>C 92</td>
<td>Introduction to Computer Security – Security +</td>
<td>3</td>
</tr>
<tr>
<td>C 94</td>
<td>Computer Information Systems Worksite Learning</td>
<td>3</td>
</tr>
<tr>
<td>OAS 11</td>
<td>Excel for Windows II</td>
<td>1</td>
</tr>
<tr>
<td>OAS 12</td>
<td>Excel for Windows III</td>
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*May be used to fulfill General Education requirements. See a counselor.

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
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<tbody>
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<td>General Electives</td>
<td>1-4</td>
</tr>
<tr>
<td><strong>Degree Total</strong></td>
<td>60★</td>
</tr>
</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.
Computer and Information Systems
Cisco Networking Certificate

This certificate program is awarded to students who have successfully completed the Introduction to Computer Science course and the CCNA sequence of courses. Students learn entry level networking skills that will help prepare them for a career in the Information Technology (IT) field. The program prepares students to take the Cisco CCNA certification exam.

REQUIREMENTS FOR CERTIFICATE:

- CIS 2 Introduction to Computer Science 4
- CIS 31 CCNA1–Networking/Home and Small Business 3
- CIS 33 CCNA3–Routing and Switching in the Enterprise 3
- CIS 34 CCNA4–Designing/Supporting Computer Networks 3

TOTAL UNITS FOR CERTIFICATE 16

Computer and Info. Systems – Computer Networking Concentration – CCNA Option

This degree program prepares students for a career working in the Information Technology (IT) field as a computer and network technician. The primary focus of this field is to design, install, and maintain computer and networking systems. The program focuses on three primary areas of study–Cisco networking, Microsoft networking, and computer maintenance. The program prepares students to take certification exams including Cisco CCNA, CompTIA A+ and Microsoft MCTS. Specific skills that are taught include switch and router installation, wireless network installation, server installation, communication technologies, host computer installation and troubleshooting, and basic electronics. Throughout the entire curriculum interpersonal skills are taught and emphasized as a vitally important part of the skill set of a successful IT technician.

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 7 – Configuration 1
- CIS 51 Windows 7 Enterprise Support Technician 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 81 Web Design (Expression Web) (1) OR 1-2
- CIS 83 Web Design Using Dreamweaver (2) 1
- CIS 90 A+ Certification Preparation/Cisco IT Essentials I 4
- INDE 138 Fundamentals of Electronics 3

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

- BUAD 10 Introduction to Business (fulfills GE Requirement) 3
- CIS 23 Concepts of Database Management 3
- CIS 39 Cisco Networking–CCNA Security 3
- CIS 60 * Visual Basic Programming (3) OR 3-4
- CIS 61 * C++ Language Programming (3) OR 3-4
- CIS 62* Java Programming (3) OR 3-4
- CIS 63* Assembly Language Programming (4) OR 3-4
- CIS 64 Web Programming Using Java/PHP/Flash (3) 3-4
- CIS 72 Fundamentals of Linux 3
- CIS 79 Adv. Web Design Using Dreamweaver and Adobe 2
- CIS 86 HTML 3
- CIS 92 Introduction to Computer Security – Security + 1
- CIS 94 Computer Information Systems Worksite Learning 1

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

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

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<tr>
<th>Major</th>
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<td><strong>Degree Total</strong></td>
<td><strong>60</strong></td>
</tr>
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</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities GE requirement and the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Continued

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Construction Technology Degree (continued):

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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</thead>
<tbody>
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<td>Additional General Education</td>
<td>21</td>
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<td>General Electives</td>
<td>4</td>
</tr>
<tr>
<td>Degree Total</td>
<td>60</td>
</tr>
</tbody>
</table>

*Note:* Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

**REQUIREMENTS FOR CONSTRUCTION TECHNOLOGY CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CONS 52</td>
<td>Residential Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CONS 54</td>
<td>Survey of the Building Industry</td>
<td>3</td>
</tr>
<tr>
<td>CONS 56</td>
<td>Essentials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>CONS 151</td>
<td>Carpentry Practices I</td>
<td>3</td>
</tr>
<tr>
<td>CONS 152</td>
<td>Carpentry Practices II</td>
<td>3</td>
</tr>
<tr>
<td>CONS 154</td>
<td>Residential Plumbing</td>
<td>3</td>
</tr>
<tr>
<td>CONS 155</td>
<td>Residential Electrical</td>
<td>3</td>
</tr>
<tr>
<td>CONS 170</td>
<td>Building Codes and Standards</td>
<td>3</td>
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<tr>
<td>ENGR 119</td>
<td>Blueprint and Specification Reading (Architectural)</td>
<td>2</td>
</tr>
<tr>
<td>MATH 100</td>
<td>Technical Applications of Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:**

29

**Customer Service Academy Certificate**

The Customer Service Academy will equip you with the ability to manage or improve many workplace issues that, if addressed, will lead to improved business productivity. The topics range from conflict resolution to team building to communicating with people (both employees and customers). This is a short list of the ten (10) topics included in the academy. You can register for one or all of the academy topics, depending on the challenge you face either personally or professionally. Each course topic requires 9 hours of study and awards .5 units of elective academic credit.

**REQUIREMENTS FOR CERTIFICATE:**

**COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUAD 81</td>
<td>Stress Management in the Workplace</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 82</td>
<td>Managing Organizational Change</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 83</td>
<td>Conflict Resolution</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 84</td>
<td>Attitude in the Workplace</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 85</td>
<td>Customer Service in the Workplace</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 86</td>
<td>Decision Making and Problem Solving</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 87</td>
<td>Team Building</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 88</td>
<td>Communicating with People</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 89</td>
<td>Time Management</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 90</td>
<td>Values and Ethics</td>
<td>.5</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:**

5

**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 critical 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 application 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 http://www.shastacollege.edu/hsp or call Division Office (530-339-3600) for specific requirements, procedures, and deadlines.

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
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<tr>
<td>General Electives</td>
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<tr>
<td>Degree Total</td>
<td>103*</td>
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*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

**Dental Hygiene (continued):**

**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/hsp](http://www.shastacollege.edu/hsp) or call Division Office (530-339-3600) for specific requirements, procedures, and deadlines.

**PREREQUISITE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 1*</td>
<td>Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>PHY 1*</td>
<td>Physiology (with Lab)</td>
<td>5</td>
</tr>
<tr>
<td>MIRC 1*</td>
<td>Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 1A*</td>
<td>College Composition</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2A*</td>
<td>Introduction to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 2B*</td>
<td>Introduction to Organic and Biochemistry</td>
<td>5</td>
</tr>
<tr>
<td>SOC 1*</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1A*</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CMST 60*</td>
<td>Public Speaking OR</td>
<td>3</td>
</tr>
<tr>
<td>CMST 10*</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL PREREQUISITE UNITS:**

41

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:**

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

**TOTAL UNITS FOR MAJOR:**

56

*May be used to fulfill General Education requirements.

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
<tr>
<td>Major</td>
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<td>General Electives</td>
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<tr>
<td>Degree Total</td>
<td>103*</td>
</tr>
</tbody>
</table>

**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.

Continued on next page
**Diesel Technology (continued)**

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>DIES 48</td>
<td>Hydraulics</td>
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</tr>
<tr>
<td>DIES 49</td>
<td>Advanced Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>DIES 94</td>
<td>Worksite Learning For Diesel Technology</td>
<td>1</td>
</tr>
<tr>
<td>DIES 160</td>
<td>Diesel Engine Electronic Control</td>
<td>4</td>
</tr>
<tr>
<td>DIES 161</td>
<td>Diesel Technology Field Training</td>
<td>2</td>
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<tr>
<td>DIES 162</td>
<td>Heavy Duty Power Train</td>
<td>4</td>
</tr>
<tr>
<td>DIES 164</td>
<td>Diesel Performance Analysis</td>
<td>4</td>
</tr>
<tr>
<td>DIES 166</td>
<td>Diesel Engines</td>
<td>6</td>
</tr>
<tr>
<td>DIES 170</td>
<td>Heavy Duty Braking Systems</td>
<td>6</td>
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**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
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*Note:* Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

**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>
<td>3.5</td>
</tr>
<tr>
<td>DIES 49</td>
<td>Advanced Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>DIES 94</td>
<td>Worksite Learning For Diesel Technology</td>
<td>1</td>
</tr>
<tr>
<td>DIES 160</td>
<td>Diesel Engine Electronic Control</td>
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<td>DIES 161</td>
<td>Diesel Technology Field Training</td>
<td>2</td>
</tr>
<tr>
<td>DIES 162</td>
<td>Heavy Duty Power Train</td>
<td>4</td>
</tr>
<tr>
<td>DIES 164</td>
<td>Diesel Performance Analysis</td>
<td>4</td>
</tr>
<tr>
<td>DIES 166</td>
<td>Diesel Engines</td>
<td>6</td>
</tr>
<tr>
<td>DIES 170</td>
<td>Heavy Duty Braking Systems</td>
<td>6</td>
</tr>
<tr>
<td>ENGL 190</td>
<td>Reading &amp; Writing II ** (see below for alternatives)</td>
<td>4</td>
</tr>
<tr>
<td>INDE 100</td>
<td>Technical Applications of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>WELD</td>
<td>Any Advanced Welding Class</td>
<td>3</td>
</tr>
<tr>
<td>WELD 70</td>
<td>Beginning Welding</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 45.5-48.5

**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 Dietary Service Supervisor, as described in CA State lawfully use the title of Dietary Service Supervisor, as described in CA State

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULA 50</td>
<td>Sanitation and Safety</td>
<td>2</td>
</tr>
<tr>
<td>DSS 10</td>
<td>Food Production Management</td>
<td>3</td>
</tr>
<tr>
<td>DSS 63</td>
<td>DSS Operations and Management</td>
<td>3</td>
</tr>
<tr>
<td>DSS 94</td>
<td>DSS Certificate Worksite Learning</td>
<td>3</td>
</tr>
<tr>
<td>FSS 25</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FSS 27</td>
<td>Nutrition and Disease</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 16

**Early Childhood Education (continued):**

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:**

<table>
<thead>
<tr>
<th>Core Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 1</td>
<td>Human Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 9</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 10</td>
<td>Early Childhood Learning</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2</td>
<td>Early Childhood Observation &amp; Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4</td>
<td>Teaching Practicum for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 15</td>
<td>Child Health, Safety and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE 17</td>
<td>Principles/Practices of Teaching Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 20</td>
<td>Introduction to Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>ECE 28</td>
<td>Teaching in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>ECE 30</td>
<td>E.C. Curriculum: Physical Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 50</td>
<td>E.C. Curriculum: Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 52</td>
<td>Guidance in Adult-Child Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 45.5-48.5

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>44</td>
</tr>
<tr>
<td>Additional General Education</td>
<td>15</td>
</tr>
<tr>
<td>General Electives</td>
<td>1</td>
</tr>
<tr>
<td>Degree Total</td>
<td>60*</td>
</tr>
</tbody>
</table>

*Note:* Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

**Early Childhood Education Certificate continued on next page**

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Early Childhood Education – Family Childcare

The Early Childhood Education Family Childcare Certificate offers students initial training for employment as a family childcare provider. After completion of the 17-unit certification program, the student will be prepared to seek a family childcare provider position or family childcare licensure (assuming ability to pass Community Care Licensing [Social Services Dept.] training requirements related to physical site).

Follow the suggested sequence of courses listed below along with the Shasta College catalog. All courses to be applied to the Early Childhood Education Family Childcare Certificate must be completed with a “C” grade or better.

REQUIREMENTS FOR CERTIFICATE:

CORE COURSES:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 1</td>
<td>Human Development OR</td>
<td>3</td>
</tr>
<tr>
<td>ECE 9</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2</td>
<td>Child, Family, Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 20</td>
<td>Introduction to Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>ECE 52</td>
<td>Guidance in Adult-Child Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

RESTRICTED ELECTIVE COURSES: (Choose five (5) units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 7</td>
<td>Early Childhood Observation and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ECE 17</td>
<td>Principles/Practices of Teaching Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 26</td>
<td>The Child With Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>ECE 27</td>
<td>Teaching Children with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>ECE 30</td>
<td>E.C. Curriculum: Physical Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 40</td>
<td>E.C. Curriculum: Affective Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 50</td>
<td>E.C. Curriculum: Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 140</td>
<td>Essentials of 40 Developmental Assets</td>
<td>1</td>
</tr>
<tr>
<td>ECE 152</td>
<td>The Young Child: Movement, Rhythm, and Sign</td>
<td>3</td>
</tr>
<tr>
<td>ECE 155</td>
<td>The Young Child: Intro. to Montessori Method</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE: 17

Engineering Technology

This curriculum is designed to prepare the individual for employment as an Architectural Draftsperson, Engineer, or Construction estimator. Students participating in this program should contact the Division Office/Engineering Coordinator at 530-242-7754, or Counselor for pertinent information.

REQUIREMENTS FOR CERTIFICATE:

CORE COURSES:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1A</td>
<td>Measurements and Plane Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2</td>
<td>Career Planning for Engineering &amp; Engr. Tech.</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 22</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 24</td>
<td>Descriptive Geometry</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 29</td>
<td>Computer-Aided Drafting (CAD)</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 30</td>
<td>Intermediate Computer-Aided Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 37</td>
<td>Statics for Engr. Tech. and Const. Management</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 38</td>
<td>Strength of Materials for Engr. Tech/Const. Mgmt.</td>
<td>3</td>
</tr>
<tr>
<td>MATH 10</td>
<td>Plane Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 102</td>
<td>Intermediate Algebra</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 2A</td>
<td>General College Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

* This course may be waived if student can demonstrate appropriate score on the Math Placement Exam or other multiple measures

RESTRICTED ELECTIVE COURSES: Choose eleven (11) units from the following:

Architectural Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 52</td>
<td>Residential Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CONS 178</td>
<td>Building Codes and Standards</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 20</td>
<td>Residential Design</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 21</td>
<td>Architectural Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 31</td>
<td>Architectural Detailing</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 119</td>
<td>Blueprint/Spec Reading (Architectural)</td>
<td>2</td>
</tr>
</tbody>
</table>

Civil Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1B</td>
<td>Plane Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 27</td>
<td>Map and Computer-Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 32</td>
<td>Civ. Design Applications for CAD</td>
<td>3</td>
</tr>
</tbody>
</table>

Mechanical Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 33</td>
<td>Solid Modeling Computer-Aided Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 118</td>
<td>Blueprint and Specification Reading (Mechanical)</td>
<td>2</td>
</tr>
</tbody>
</table>

Other Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGNR 83</td>
<td>Introduction to Global Positioning Systems (GPS)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 25</td>
<td>Structural Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 26</td>
<td>Industrial Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 64</td>
<td>Engineering Materials Testing</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 94</td>
<td>Engineering Worksite Learning</td>
<td>1-4</td>
</tr>
<tr>
<td>ENGR 37</td>
<td>Special Topics</td>
<td>5-2</td>
</tr>
<tr>
<td>ENGR 98</td>
<td>Special Lab</td>
<td>5-2</td>
</tr>
</tbody>
</table>

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

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

Degree Total: 60*

Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.
Other Electives

Civil Electives
ENGR 1B Plane Surveying 3
ENGR 27 Map and Computer-Aided Drafting 3
ENGR 32 Adv. Civil Design Applications for CAD 3

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

Other Electives
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
AGNR 63 Introduction to Global Positioning Systems (GPS) 1

TOTAL UNITS FOR CERTIFICATE 41

Family Studies

This program is designed to provide students with foundational skills and concepts about human interaction within the primary social, cultural, and economic system of our society – the family. Individual and family issues that arise from changing societal patterns have created a vast need for a variety of support services. Students with an A.S. Degree in Family Studies will have the opportunity to enter the Human Services field in a number of paraprofessional positions, and with additional coursework would be prepared to transfer to a four-year college/university with lower division preparation for a Bachelor’s of Social Work.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:
There are a minimum of 44 units in the major required for the Associate in Science Degree in Family Studies. Twenty-one (21) units of General Education, plus electives to total 60 units will complete the A.S. Degree requirements. Some major courses may be double counted toward the General Education unit requirement. Students planning to transfer to a Social Work Baccalaureate Program should consider utilizing available General Education units and elective units to complete the specific lower division requirements of the transfer school of their choice. It is imperative to consult the catalog of that institution.

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 18* Marriage & Family 3
FSS 25* Nutrition OR 3
BIOL 5* Introduction to Human Biology 3
FSS 46* Personal Finance OR 3
ECON 1A* Principles of Economics (MICRO) OR 3
ECON 1B* Principles of Economics (MACRO) 3
FSS 60* Life Management 3
FSS 94 Family Studies & Services Worksite Learning 1-4
FSS 95 Worksite Integration 1
PSYC 1A* General Psychology 3
PSYC 41* Cultural/Social Context of Childhood 3
SOC 1* Introduction to Sociology 3
SOC 70* Social Welfare 3

44

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

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:
Major 35.5
Additional General Education 12
General Electives 12.5
Degree Total 60*

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

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

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
### Geographic Information Systems

Geographic Information Systems (GIS) are applied in a wide array of fields including planning, business, public health, natural resource management and emergency response. The Geographic Information Systems (GIS) Certificate at Shasta College provides students the skills needed to apply a range of geospatial technologies and tools in a variety of applications. Students develop foundation skills in map use and in working with geographically referenced data. From this foundation, GIS fundamentals are taught, both in conceptual and practical terms. Data from a range of sources, from global positioning systems (GPS) to the Internet, are integrated to produce maps and answer geographic questions. Worksite learning allows students to gain GIS work experience.

**REQUIREMENTS FOR CERTIFICATE:**

**CORE COURSES:**
- GEOG 5 Digital Planet 3
- GEOG 11 Map Principles 1
- GIS 1 Survey of Digital Mapping 1
- GIS 10 Introduction to GIS 3
- GIS 20 Spatial Databases 1
- GIS 22 GIS Data Creation 2
- GIS 23 Raster GIS 1
- GIS 25 GIS Projects 1
- GIS 94 Worksite Learning 2

**RESTRICTED ELECTIVE COURSES:** (Students must complete two units from two different courses.)
- AGNR 10 Satellite Imagery/Mapping Techniques for NR 4
- ENGR 29 Computer-Aided Drafting 3
- CIS 1 Computer Literacy Workshop 3
- CIS 2 Introduction to Computer Science 3
- CIS 20-22 Access for Windows 1
- CIS 73-74 Photoshop 1

**ADDITIONAL SUPPORTING COURSES:**
- AGNR 83 Introduction to GPS 1
- CIS 52 Windows 2008 Server 1
- ENGR 1A Plane Surveying 3
- GEOG 5 Digital Planet 3
- GIS 24 Customizing GIS 1
- GIS 97 Special Topics in GIS 1

**TOTAL UNITS FOR CERTIFICATE** 17

### Hospitality – Baking – Culinary Arts Emphasis

This certificate provides a foundation in business mathematics, safety and sanitation, prepare food, demonstrate plate presentations, use weights and measures, and interpret recipes. Students completing this certificate will be able to apply safety and sanitation principles and practices for personal and institutional application, and fundamental baking skills for students who intend to specialize in baking and pastry making for commercial production. Production of yeast and quick breads, cakes, cookies, pies, and pastries, as well as decorating and icings are undertaken. This certificate provides a base for students interested in basic baking techniques and who are also interested in moving forward with additional skills in the Culinary Arts field.

**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

Students completing this certificate will be able to apply safety and sanitation principles and practices for a beverage operation, describe service skills for wine, beer, and spirits products, and identify wines from the wine districts of California, France, Germany, and Italy. This certification will provide knowledge and skills for those entering a new position for those interested in sharpening their skills in a current position. **Limitation on enrollment:** Students must be 21 years of age or older to complete this certificate.

**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

This certificate provides a foundation for students interested in entry level dining room management. In addition to an overview of the hospitality industry, areas of focus will include legal aspects of hospitality operations, principles of safety and sanitation, skills for delivery of effective service in a dining room environment, theory of wine sales and service, and business mathematics.

**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 30 Introduction to Hospitality 3
- HOSP 45 Restaurants, Hotels, and Lawful Management 2

**TOTAL UNITS FOR CERTIFICATE** 12-15

### Hospitality – Dining Room Staff – Culinary Arts Emphasis

Students completing this certificate will have practiced and demonstrated basic skills for front-of-the-house service in a live food and beverage operation. Additionally, students will apply principles of safety and sanitation and business mathematics. This certificate provides skills necessary for an entry-level food service position.

**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

**TOTAL UNITS FOR CERTIFICATE** 5-8

### Hospitality – Enology and Viticulture Practices

Students will be able to demonstrate grape growing and winemaking practices with completion of this certificate. One unit of worksite learning experience is also required. This certificate is particularly useful for students interested in growing grapes and making wine for either personal or eventual commercial use. **Limitation on enrollment:** Students must be 21 years of age or older to complete this certificate.

**REQUIREMENTS FOR CERTIFICATE:**

- AGEH 94 Horticulture Worksite Learning 1
- AGVIT 80 Vineyard Design and Construction 1
- AGVIT 81 Vineyard Care 1
- CULA 74 Basic Winemaking 2
- CULA 76 Intermediate Winemaking 2

**TOTAL UNITS FOR CERTIFICATE** 7

### Hospitality – European and California Wines

With completion of this certificate, students will recognize the historical and winemaking differences and similarities that exist between European and North American wines. This certificate is particularly beneficial for those pursuing more knowledge of wines of the world for a personal or business use. **Limitation on enrollment:** Students must be 21 years of age or older to complete this certificate.

**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

This certification prepares a student with the basic skills to be a line cook in a food operation. Students will recognize the importance of safety and sanitation, prepare food, demonstrate plate presentations, use weights and measures, and interpret recipes.

**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 – 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:

- AGEH 94 Horticulture Worksite Learning 1
- AGVIT 80 Vineyard Design and Construction 1
- AGVIT 81 Vineyard Care 1
- CULA 66 Wine With Food 2
- CULA 73 Introduction to Wine 2
- CULA 74 Basic Winemaking 2
- CULA 76 Intermediate Winemaking 2
- CULA 78 Sensory Evaluation of Wine 2
- CULA 80 Wine Sales and Marketing 3
- CULA 88 Wines of the North State 1

TOTAL UNITS FOR CERTIFICATE: 17

Hospitality Management – Culinary Arts Concentration

With this degree, graduates enter the culinary field well prepared for entry-level employment, many progressing to management positions. Students will apply principles in sanitation and safety, hospitality, basic food production, nutrition, management, advanced finance, and gourmet food preparation. Business communications and general education requirements are also required for the degree. Hands-on worksite learning provides the student additional experience in the field.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

- CORE COURSES:
  - BUAD 66* Business Communications 3
  - CULA 45 Basic Food Production 5
  - CULA 46 Advanced Foods 5
  - CULA 48 Gourmet Food Preparation 3
  - CULA 49 Menu Planning and Cost Analysis 2
  - CULA 50 Sanitation and Safety 2
  - CULA 55 Purchasing 2
  - CULA 60 Beverage Management 2
  - CULA 65 Dining Room Service 3
  - CULA 75 Pastry 2
  - CULA 94 Culinary Arts Worksite Learning 1
  - CULA 159 Stocks, Soups, Sauces & Basic Culinary Prep. 2
  - CULA 161 The Art of Garde Manger 2
  - CULA 172 Baking 2
  - FSS 25* Nutrition 3
  - HOSP 10 Introduction to the Hospitality Industry 3
  - HOSP 65 Hospitality Supervision 3

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

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

- Major: 45
- Additional General Education: 15
- General Electives: 0
- Degree Total: 60*

Note: Calculation assumes a student will double-count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

REQUIREMENTS FOR CERTIFICATE:

With this certificate, students will enter the Culinary Arts field and should be able to demonstrate principles in sanitation and safety, hospitality, basic food production, nutrition, and business mathematics. Additional skills will be applied in beverage management, advanced foods, menu planning and cost analysis, human resources management, purchasing, dining room service, baking, supervision, garde manger, and actual worksite learning.

- BUAD 106 Business Mathematics 3
- CULA 45 Basic Food Production 5
- CULA 46 Advanced Foods 5
- CULA 48 Gourmet Foods Preparation 3
- CULA 49 Menu Planning and Cost Analysis 2
- CULA 50 Sanitation and Safety 2
- CULA 55 Purchasing 2
- CULA 60 Beverage Management 2
- CULA 65 Dining Room Service 3
- CULA 88 Wines of the North State 1
- CULA 159 Stocks, Soups, Sauces & Basic Culinary Prep. 2

Continued

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:

- DIES 48 Hydraulics 3.5
- INDE 101 Industrial Occupation Basics 3
- INDE 138 Fundamentals of Electronics and Electricity 3
- MATH 100 Technical Applications of Mathematics 3
- WELD 70 Beginning Welding 3

TOTAL UNITS FOR CERTIFICATE: 15.5

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Music
The AA curriculum in Music is designed to provide preparation for either transfer to a CSU or UC as a music major and/or assist in development for a career in music within a variety of music career choices. A few of these career options could be: working in the music industry, music performance, music education, music publishing, musical theater, and composition. The Certificate in Music can prepare students for employment in retail music merchandising and private music instruction. Additionally the music curriculum creates an opportunity for local amateur and professional musicians to perform within the music department's music performance ensembles (Choirs, Orchestras, Symphonic Bands, and Jazz Ensembles) and/or to advance their music skills.

REQUIREMENTS FOR ASSOCIATE IN ARTS DEGREE:
Students must complete the courses required for the Certificate. In addition, students must complete four units chosen from the following:

- MUS 2 Diatonic Harmony and Musicianship 5
- MUS 3 Diatonic Harmony and Musicianship 5
- MUS 4 Chromatic Harmony 5
- MUS 5 20th Century Harmony 5

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

- MUS 30 Intermediate Voice 1
- MUS 31 Chamber Choir 1
- MUS 33 Jazz Ensemble 1
- MUS 35 Vocal Jazz Ensemble 1
- MUS 39 Chamber Choir 1
- MUS 40 Concert Choir 1
- MUS 41 Shasta College Women's Ensemble 1
- MUS 42 Shasta College Chorale 1
- MUS 43 Shasta College Symphony Orchestra 1
- MUS 44 Shasta College Youth Symphony 1
- MUS 45 Wind Band 1
- MUS 46 Shasta College Symphonic Band 1
- MUS 47 Shasta College Jazz Ensemble 1

TOTAL UNITS FOR CERTIFICATE 15

RECOMMENDED ELECTIVE COURSES:
- MUS 1 Music Fundamentals (pre-Music Major only) 3
- MUS 10* Music Appreciation (valid for G.E.) 3
- MUS 11* History of Jazz and Rock (valid for G.E.) 3

*Recommended elective courses continued

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.

CORE COURSE:
HEOC 180 Nurse Aide/Home Health Aide 13

TOTAL UNITS FOR CERTIFICATE: 13

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 screen, background check, 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.

Continued on next page
**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

**Major**
- ANAT 1* Anatomy 5
- ANAT 1* **Anatomy** 5
- PHY 1* Physiology (with lab) 5

**Core Courses**
- ENGL 1A* College Composition 4
- PSYC 1A* General Psychology OR 3
- PSYC 14* Understanding Human Behavior 3
- CMST 10* Interpersonal Communication OR 3
- CMST 54* Small Group Communication OR 3
- CMST 60* Public Speaking

**Total Units for Prerequisites:** 28

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

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS (LVN/RN Option):**

<table>
<thead>
<tr>
<th>Total</th>
<th>Degree Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>60*</td>
</tr>
</tbody>
</table>

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

**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.

**Nursing – Vocational Nursing**

This curriculum is designed to prepare selected individuals to provide nursing care requiring technical-manual skills under the supervision of a Registered Nurse or physician. Upon successful completion of the program, a student receives a Certificate of Completion and is eligible to take the NCLEX-PN for licensure as a Vocational Nurse. Students who have had previous education and experience in nursing will be given the opportunity to receive credit toward completion of the program.

Space in the program is limited. A new class is enrolled every three semesters. In order to be eligible for enrollment, students must satisfy the prerequisites listed below an enrollment packet with the Admissions Office during designated enrollment periods in each semester. All qualified applicants are placed on a waiting list and enrolled on a space available basis in the order of their accepted application date. For specific information, see the program web page at [www.shastacollege.edu/lvn](http://www.shastacollege.edu/lvn) or call the Division Office (530-339-3606).

**REQUIREMENTS FOR ENROLLMENT INTO THE PROGRAM:**

1. Students must have a high school diploma or equivalent.
2. Students must be a current Certified Nurse Aide (CNA).
3. Students must complete the following prerequisite courses with a C grade or better.

**PREREQUISITE COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 5</td>
<td>Introduction to Human Biology</td>
</tr>
<tr>
<td>BIOL 6</td>
<td>Human Biology Lab</td>
</tr>
<tr>
<td>ECE 1</td>
<td>Human Development</td>
</tr>
<tr>
<td>FSS 25</td>
<td>Nutrition</td>
</tr>
<tr>
<td>PSYC 1A</td>
<td>General Psychology OR</td>
</tr>
<tr>
<td>PSYC 14</td>
<td>Understanding Human Behavior</td>
</tr>
</tbody>
</table>

Certificate requirements continued on next page.
Office Administration –
Administrative Office Assistant

This certificate prepares you to be an entry 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 project a professional image in person and on the phone. Confidential: Handling of mail, money, and receipts. General: Research and price office furniture and supplies with attention to detail. Obtaining on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

REQUIREMENTS FOR CERTIFICATE:
BUAD 166 Business English 3
CIS 1 Computer Literacy Workshop 3
OAS 10 Excel for Windows I 1
OAS 51 Introduction to Keyboarding and Word 1
OAS 64 Computerized 10-Key 0.5
OAS 80 Outlook 1
OAS 152 Keyboarding for Speed and Accuracy 0.5
OAS 157 Office Procedures OR 3
OAS 158 Medical Office Procedures

TOTAL UNITS FOR CERTIFICATE: 15

Office Administration –
Administrative Office Professional

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: Advanced 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 project 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. Obtaining on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

CORE COURSES:
ACCT 101 Basic Accounting I 3
ACCT 103 PC Accounting 2
BUAD 45 Relations on the Job 3
BUAD 66 Business Communications 3
BUAD 106 Business Mathematics 3
BUAD 166 Business English 3
CIS 1 Computer Literacy Workshop
CIS 20 Access for Windows I 1
OAS 10 Excel for Windows I 1
OAS 11 Excel for Windows II 1
OAS 51 Introduction to Keyboarding and Word 1
OAS 52 Intermediate Keyboarding and Word 3
OAS 53 Advanced Keyboarding and Word 3
OAS 64 Computerized 10-Key 0.5

Course requirements continued

Administrative Office Professional degree requirements (continued):

OAS 80 Outlook 1
OAS 92 Word for Windows II 1
OAS 101 Introduction to Keyboarding and Word 3
OAS 152 Keyboarding for Speed and Accuracy 3
OAS 157 Office Procedures 3
OAS 166 Records Management 3
OAS 171 Proofreading Skills 2

RECOMMENDED COURSES (not required):
CIS 53 Web Design Using Dreamweaver 2
OAS 12 Excel for Windows III 1
OAS 93* Word for Windows III 1

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

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:
Major: 43
Additional General Education 15
General Electives 2
Degree Total 60*

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, with related clerical duties essential to medical office assisting. Obtaining on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

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
OAS 10 Excel I 1
OAS 51 Introduction to Keyboarding and Word 3
OAS 52 Intermediate Keyboarding and Word 3
OAS 64 Computerized 10-Key 0.5
OAS 80 Outlook 1
OAS 110 Beginning Medical Terminology 3
OAS 111 Advanced Medical Terminology 3
OAS 112 Basic ICD-9-CM and CPT-4 Coding 3

Course requirements continued on next page
Office Admin – Health Info Management degree requirements (continued):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>OAS 150</td>
<td>Computerized Medical Account Management</td>
<td>3</td>
</tr>
<tr>
<td>OAS 152</td>
<td>Keyboarding for Speed and Accuracy</td>
<td>.5</td>
</tr>
<tr>
<td>OAS 158</td>
<td>Medical Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OAS 160</td>
<td>Medical Transcription</td>
<td>3</td>
</tr>
<tr>
<td>OAS 166</td>
<td>Records Management</td>
<td>2</td>
</tr>
<tr>
<td>OAS 171</td>
<td>Proofreading Skills</td>
<td>2</td>
</tr>
</tbody>
</table>

**RECOMMENDED COURSES (not required):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAS 11</td>
<td>Excel for Windows II</td>
<td>1</td>
</tr>
<tr>
<td>OAS 53</td>
<td>Advanced Keyboarding and Word</td>
<td>3</td>
</tr>
<tr>
<td>OAS 92</td>
<td>Word for Windows II</td>
<td>1</td>
</tr>
</tbody>
</table>

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

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Major</td>
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<tr>
<td>Additional General Education</td>
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<tr>
<td>General Electives</td>
<td>0</td>
</tr>
<tr>
<td><strong>Degree Total</strong></td>
<td><strong>64</strong></td>
</tr>
</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

**REQUIREMENTS FOR CERTIFICATE:**

This program is designed to prepare the student for an entry-level position in the medical office. Skills learned: prepare claims for health care facilities, clinics, physicians' offices, medical equipment companies, medical billing service companies, transcription, and record management. Upon completion of this program, the graduate should have the necessary knowledge and skills to secure employment in either the medical provider or health career sectors. Obtaining on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

- **BUAD 166** Business English                  | 3      |
- **CIS 1** Computer Literacy Workshop           | 3      |
- **OAS 10** Excel for Windows I                 | 1      |
- **OAS 51** Introduction to Keyboarding and Word| 3      |
- **OAS 52** Intermediate Keyboarding and Word   | 3      |
- **OAS 84** Computerized 10-Key                 | .5    |
- **OAS 80** Outlook                             | 1      |
- **OAS 110** Beginning Medical Terminology      | 3      |
- **OAS 112** Basic ICD-9-CM and CPT-4 Coding    | 3      |
- **OAS 150** Computerized Medical Account Management | 3 |
- **OAS 152** Keyboarding for Speed and Accuracy | .5    |
- **OAS 158** Medical Office Procedures           | 3      |
- **OAS 160** Medical Transcription              | 3      |
- **OAS 166** Records Management                 | 2      |
- **OAS 171** Proofreading Skills                | 2      |

**TOTAL UNITS FOR CERTIFICATE:**        **34**

**RECOMMENDED COURSES (not required):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAS 11</td>
<td>Excel for Windows II</td>
<td>1</td>
</tr>
<tr>
<td>OAS 53</td>
<td>Advanced Keyboarding and Word</td>
<td>3</td>
</tr>
<tr>
<td>OAS 92</td>
<td>Word for Windows II</td>
<td>1</td>
</tr>
</tbody>
</table>

**Retail Management**

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

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 41</td>
<td>Leadership and Supervision</td>
<td>3</td>
</tr>
<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 77</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 91</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 176</td>
<td>Retail Management</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>CMST 10</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:**        **30**

**ASSOCIATE IN ARTS IN SOCIOLOGY FOR TRANSFER**

Sociology is the systematic and scientific study of society and social behavior. The sociologist looks beyond individual and unique events to the predictable broad patterns and regular occurrences of social life that influence individuals. Studies range from the profound impact of post-industrial societies on family life, crime, mass communications, gender, race, ethnicity and intergenerational relations to the study of emotions and the values that govern daily social encounters.

The sociology major is designed to provide undergraduate preparation leading to careers in social work, politics, law, public administration, the nonprofit sector, international development, marketing, urban and environmental planning, public relations, personnel, criminal justice, counseling and other social service professions. The Associate in Arts in Sociology for Transfer degree will also prepare a student for advanced studies in several areas, including sociology, social work, environmental studies, education, public health and urban planning. This degree prepares students for a CSU Baccalaureate Degree in Sociology.

**REQUIREMENTS:**

In addition to the 33-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Communication Studies for Transfer Degree. Students must also obtain a minimum grade point average of 2.0.

**REQUIRED CORE:**

- **SOC 1** Introduction to Sociology              | 3      |
- **SOC 2** Social Problems                        | 3      |
- **MATH 14** Introduction to Statistics            | 4      |
- **LIST B (Choose six units from the following):** | 6      |
  - **PSYC 15** Social Psychology (3 units)          |       |
  - **SOC 25** Sociology of Minorities (3 units)     |       |
  - **SOC 30** Sociology of Gender (3 units)         |       |
- **LIST C (Choose three units from the following):** | 3      |
  - Any List A or List B course not used above      |       |
  - **ANTH 2** Cultural Anthropology (3 units)        |       |
  - **GEOG 1B** Cultural Geography (3 units)         |       |
  - **PSYC 14A** General Psychology (3 units)         |       |
  - **SOC 15** Sociology of Mass Media (3 units)      |       |
  - **SOC 22** Sociology of Aging (3 units)           |       |
  - **SOC 70** Social Welfare (3 units)               |       |

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

**ASSOCIATE IN ARTS IN SOCIOLOGY FOR TRANSFER DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
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<td>Additional General Education</td>
<td>33-39</td>
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<tr>
<td>General Electives</td>
<td>2-6</td>
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<tr>
<td><strong>Degree Total</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

**Theatre Arts**

The Theatre Arts program is academically grounded in the liberal arts tradition of literature, performance, cultural studies, history, philosophy, and technical skills. It also provides a hands-on, learn-by-doing environment that gives students experiences and skills to complement many career paths. Employers find theatre trained applicants become valuable employees because they have developed excellent communication and problem-solving skills, confidence, and the ability to work cooperatively with a diverse team of people.

**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                | 2      |
- **THTR 23/26** Mainstage Production I/II OR       | 3      |
- **THTR 70** Repertory Theatre I                   | 3      |
- **THTR 30** Stagecraft I                         | 3      |
- **THTR 41** Theatre Laboratory OR                 | 3      |
- **THTR 74** Repertory Theatre – Technical         |       |

*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** Stagecraft II                        | 3      |
- **THTR 31** Makeup                               | 2      |
- **THTR 37** Theatre Management                   | 3      |
- **THTR 81** Introduction to Playwriting          | 3      |

Requirements continued on next page

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Theatre Arts Certificate (continued):
And four units from the following Practicum courses:
THTR 24 Mainstage Production II – Music 1-4
THTR 26 Mainstage Production II - Choreography 1-4
THTR 42 Stage Production Laboratory  .5-4
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
TOTAL UNITS FOR CERTIFICATE 26

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

REQUIREMENTS FOR ASSOCIATE IN ARTS DEGREE:
Students must complete the courses required for the Certificate. In addition, students fulfill the remaining general education and graduation requirements.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>Major</td>
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<tr>
<td>Additional General Education</td>
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<td>General Electives</td>
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</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADAP 210</td>
<td>Career Development</td>
<td>1</td>
</tr>
<tr>
<td>ADAP 254</td>
<td>Adapted Computer Skills: Semester 1</td>
<td>1</td>
</tr>
<tr>
<td>ADAP 254</td>
<td>Adapted Computer Skills: Semester 2</td>
<td>1</td>
</tr>
<tr>
<td>ADAP 255</td>
<td>Human Awareness: Semester 1</td>
<td>2</td>
</tr>
<tr>
<td>ADAP 255</td>
<td>Human Awareness: Semester 2</td>
<td>2</td>
</tr>
<tr>
<td>ADAP 256</td>
<td>Reading for Life Skills: Semester 1</td>
<td>1</td>
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<tr>
<td>ADAP 256</td>
<td>Reading for Life Skills: Semester 2</td>
<td>2</td>
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<tr>
<td>ADAP 258</td>
<td>Math for Life Skills: Semester 1</td>
<td>2</td>
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<td>ADAP 258</td>
<td>Math for Life Skills: Semester 2</td>
<td>2</td>
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<tr>
<td></td>
<td>Total Units for Certificate</td>
<td>15</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AGNR 50</td>
<td>Natural Resources Measurements</td>
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<tr>
<td>AGNR 64</td>
<td>Watershed Management and Ecology</td>
<td>3</td>
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<tr>
<td>AGNR 66</td>
<td>Watershed Restoration</td>
<td>1</td>
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<tr>
<td>CONS 46</td>
<td>Equipment Operations and Maintenance</td>
<td>3</td>
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<tr>
<td>CONS 47</td>
<td>Project Construction for Equipment Operations</td>
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<tr>
<td></td>
<td>Total Units for Certificate</td>
<td>14</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTT 177</td>
<td>Introduction to Wastewater Treatment</td>
<td>3</td>
</tr>
<tr>
<td>WTT 180</td>
<td>Introduction to Water Treatment Tech</td>
<td>3</td>
</tr>
<tr>
<td>WTT 181</td>
<td>Intermediate Water Treatment Tech</td>
<td>3</td>
</tr>
<tr>
<td>WTT 183</td>
<td>Intermediate Wastewater Treatment</td>
<td>3</td>
</tr>
<tr>
<td>WTT 184</td>
<td>Small Water Systems and Distribution</td>
<td>3</td>
</tr>
<tr>
<td>WTT 186</td>
<td>Advanced Wastewater Treatment</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Units for Certificate</td>
<td>18</td>
</tr>
</tbody>
</table>

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 two formats:

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

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>DIES 48</td>
<td>Hydraulics</td>
<td>3.5</td>
</tr>
<tr>
<td>ENGL 1A*</td>
<td>College Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 119</td>
<td>Blueprint and Specification Reading (Mechanical)</td>
<td>2</td>
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<tr>
<td>INDE 1</td>
<td>Career Planning for Industrial Technology</td>
<td>1</td>
</tr>
<tr>
<td>MATH 110*</td>
<td>Essential Math</td>
<td>3</td>
</tr>
<tr>
<td>WELD 70</td>
<td>Beginning Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 73</td>
<td>Structural Steel Metal Fabrication</td>
<td>3</td>
</tr>
<tr>
<td>WELD 170</td>
<td>Introduction to ARC Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 171</td>
<td>Intermediate ARC Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 174</td>
<td>Structural Steel MIG Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 175</td>
<td>TIG Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 178</td>
<td>Pipe Welding Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>WELD 182</td>
<td>Advanced ARC Welding</td>
<td>1</td>
</tr>
<tr>
<td>WELD 184</td>
<td>Advanced GTAW (TIG) Welding</td>
<td>1</td>
</tr>
<tr>
<td>WELD 186</td>
<td>Advanced Pipe Welding</td>
<td>2</td>
</tr>
<tr>
<td>WELD 188</td>
<td>Advanced GMAW (MIG) Welding</td>
<td>1</td>
</tr>
<tr>
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<td>Total Units for Certificate</td>
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</tbody>
</table>

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

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Major</td>
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</tr>
<tr>
<td>Additional General Education</td>
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</tr>
<tr>
<td>General Electives</td>
<td>5.5</td>
</tr>
<tr>
<td>Degree Total</td>
<td>60*</td>
</tr>
</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

REQUIREMENTS FOR ONE/YEAR/FAST TRACK CERTIFICATE:

**ENGR 118** Blueprint & Specification Reading 2
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 28

REQUIREMENTS FOR AMERICAN WELDING SOCIETY CERTIFICATION:
In order to become certified by the American Welding Society, the following courses are offered for the student to increase his/her skill and knowledge. 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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 182</td>
<td>Advanced ARC Welding</td>
<td>1</td>
</tr>
<tr>
<td>WELD 184</td>
<td>Advanced GTAW (TIG) Welding</td>
<td>1</td>
</tr>
<tr>
<td>WELD 186</td>
<td>Advanced Pipe Welding</td>
<td>2</td>
</tr>
<tr>
<td>WELD 188</td>
<td>Advanced GMAW (MIG) Welding</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total Units for Certificate</td>
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</table>