Shasta College 2013-14
Associate Degree Requirements

The information provided below gives a brief description of the degrees offered at Shasta College. It does not outline all of the requirements to obtain an associate degree from Shasta College or all of the requirements to transfer to a four-year college or university. All students should schedule an appointment with a counselor to ensure that they meet all of the degree and/or transfer requirements. Meeting with a counselor also helps ensure that the student is pursuing a degree that meets his or her educational and career goals.

TRANSFER DEGREES

The following associate degrees for transfer are designed for the student who wishes to complete lower-division requirements in preparation for transfer to a four-year college or university.

AA-T and AS-T (Transfer Degree):

Designed for the student planning on transferring to the California State University (CSU) system. Students complete the CSU or IGETC general education pattern and specific courses related to their major. Students who are awarded these degrees are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses. This degree requires a minimum of 60 transferrable units. The student completing this degree is not subject to specific community college graduation requirements.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirement for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs. Shasta College offers the following AA-T/AS-T degrees:

- Administration of Justice
- Business Administration
- Communication Studies
- Early Childhood Education
- Kinesiology
- Psychology
- Sociology
- Studio Arts
- Theatre Arts
- Multicultural Studies
- Oceanography
- Physical Education
- Physical Sciences
- Science Teacher – Earth
- Social Sciences
- World Languages

Requirements:

1. Unit Requirement: Minimum of 60 California State University (CSU) transferrable semester units, courses numbered 1-99 at Shasta College.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 in all transferrable coursework. While a minimum of 2.0 is required for this degree, some majors or transfer universities may require a higher GPA. Please consult with a counselor for more information.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
4. Course Requirements:
   a. Major Field of Study: Select an "AA-T" or "AS-T" major. All courses in the major must be completed with a grade of "C" or higher.
   b. General Education: Completion of one of three general education options.
      i. Advanced Placement (AP) examination credit can be used to satisfy both California State University General Education (CSU GE) and IGETC.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy both CSU GE and IGETC. Note: The University of California does not accept credit awarded through CLEP.
5. Competency Requirements:
   a. Oral Communication, English Composition, Critical Thinking, and Quantitative Reasoning courses must be completed with a grade of "C" or higher.
6. These degrees do not require completion of a multicultural course or demonstration of computer literacy for Shasta College graduation purposes.

AA – University Studies Degree:

Designed for students who plan on transferring to a four-year college or university. Students complete a General Education pattern, one emphasis area, and electives to total a minimum of 60 transferrable units for the AA degree.

Requirements:

1. Unit Requirement: Minimum of 60 transferrable semester units, courses numbered 1-99 at Shasta College. Note: Please see a counselor to ensure that all of your units are transferrable since there are some exceptions to this rule.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 in all transferrable coursework. While a minimum of 2.0 is required for this degree, some majors or transfer institutions may require a higher GPA. Please consult with a counselor for more information.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
4. Course Requirements:
   a. Major Field of Study: Select a University Studies emphasis area. All courses in the emphasis area must be completed with a grade of "C" or higher.
   b. General Education: Completion of one of three general education options. Note: If completing Intersegmental General Education Transfer Curriculum (IGETC) all courses must be completed with a grade of "C" or higher.
      i. Advanced Placement (AP) examination credit can be used to satisfy both California State University General Education (CSU GE) and IGETC.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy both CSU GE and IGETC. Note: The University of California does not accept credit awarded through CLEP.

(Requirements continued on next page)
AA Degree – University Studies requirements continued:

5. **Competency Requirements:**
   a. English Composition, Critical Thinking, and Quantitative Reasoning courses must be completed with a grade of “C” or higher. Note: If you are completing General Education options 2 or 3, an Oral Communication course is also required to be completed with a grade of “C” or higher.
   
   b. Multicultural Requirement: 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 group perspectives as well as their similarities and differences.

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<thead>
<tr>
<th>ADJU 24</th>
<th>CHIN 1</th>
<th>FREN 1, 2, 3, 4</th>
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<td>ANTH 2, 14, 25</td>
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<td>HIST 2, 3, 25, 35, 36, 38</td>
<td>PSYC 20, 41</td>
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   c. Computer Literacy Competency 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.
      - 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 IC³ certification.
      - Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
      - Document completion of a computer literacy requirement at another college.
      - Minimum of three units to include the coursework options listed below with a grade of C or better:

   - OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
     - 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.

**AA Degree – Art** and **Music**:

For students planning to transfer to a four-year college or university, students complete the CSU or IGETC general education pattern and the “Core Courses” electives to total a minimum of 60 transferrable units.

REQUIREMENTS:

1. **Unit Requirement:** Minimum of 60 transferrable semester units, courses numbered 1-99 at Shasta College. Note: Please see a counselor to ensure that all of your units are transferable since there are some exceptions to this rule.

2. **Scholarship Requirement:** An overall grade point average (GPA) of not less than 2.0 in all transferrable coursework. While a minimum of 2.0 is required for this degree, some majors or transfer institutions may require a higher GPA. Please consult with a counselor for more information.

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

4. **Course Requirements:**
   a. Major Field of Study: All courses in the major must be completed with a grade of “C” or higher.
   b. General Education: Certified completion of the California State University General Education (CSU GE); OR the Intersegmental General Education Transfer Curriculum (IGETC). Note: If completing IGETC all courses must be completed with a grade of "C" or higher.
      i. Advanced Placement (AP) examination credit can be used to satisfy both CSU GE and IGETC.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy CSU GE. Note: The University of California does not accept credit awarded through CLEP.

5. **Competency Requirements:**
   a. English Composition, Critical Thinking, and Quantitative Reasoning courses must be completed with a grade of “C” or higher. Note: If completing the CSU GE pattern you must also complete an Oral Communication course with a grade of “C” or higher.
   b. Multicultural Requirement: 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 group perspectives as well as their similarities and differences.

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   c. Computer Literacy Competency 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.
      - 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 IC³ certification.
      - Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
      - Document completion of a computer literacy requirement at another college.
      - Minimum of three units to include the coursework options listed below with a grade of C or better:

   - OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
     - 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.
Chapter 5 – Degrees and Certificates

AS Degree:
Designed for the student planning on transferring to a four-year college or university. Students complete the CSU or IGETC general education pattern and the “Core Courses” electives to total a minimum of 60 transferrable units. Shasta College offers the following AS Transfer Degrees.

- Agriculture – Agricultural Business
- Agriculture – Environmental Horticulture
- Agriculture – Sustainable Agriculture

REQUIREMENTS:
1. Unit Requirement: Minimum of 60 transferrable semester units, courses numbered 1-99 at Shasta College.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 in all transferrable coursework. While a minimum of 2.0 is required for this degree, some majors or transfer institutions may require a higher GPA. Please consult with a counselor for more information.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
4. Course Requirements:
   a. Major Field of Study: All courses in the major must be completed with a grade of “C” or higher.
   b. General Education: Certified completion of the California State University General Education (CSU GE).
      i. Advanced Placement (AP) examination credit can be used to satisfy CSU GE.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy CSU GE. Note: The University of California does not accept credit awarded through CLEP.
5. Competency Requirements:
   a. Oral Communication, English Composition, Critical Thinking, and Quantitative Reasoning courses must be completed with a grade of “C” or higher.
   b. Multicultural Requirement: 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 group perspectives as well as their similarities and differences.
   c. Computer Literacy Competency 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.
      - 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 IC² 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.
      - Minimum of three units to include the coursework options listed below with a grade of C or better:
        - OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
          - CIS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (Powerpoint).
          - 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.
          - Minimum of three units to include the coursework options listed below with a grade of C or better:
            - OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
              - 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.

NON–TRANSFER DEGREES
The associate degrees for non-transfer are designed for the student whose immediate goal is to seek out employment after completion of the degree, not to transfer to a four-year college or university.

AS General Studies Degree:
Designed for students desiring a two-year degree to prepare to enter the workforce or continue in their current career. The choice of emphasis allows the student to explore an area of interest while providing sufficient depth in a field of knowledge to contribute to lifelong interest. Students complete the Associate Degree-General Education, one emphasis area, and electives to total a minimum of 60 units of coursework at the associate and transfer level.

- Agricultural Trades
- Business – Basic Business
- Climatological and Meteorological Studies
- Coastal Oceanographic Studies
- Fire – Fire Service Command, Co.Officer
- Fire – Fire/Rescue Technologies
- Fire – Fire Service Leadership
- Food and Beverage and Lodging
- Geologic Field Studies
- Geographical Information Systems
- Health
- History
- Industrial Technologies
- International Business
- Language Arts
- Language and Literature
- Management
- Management Information Systems
- Marketing
- Management of Natural Resources
- Natural Sciences
- Office and Computer Technologies
- Personal and Business Communications
- Political Science
- Psychology
- Public Safety and Services
- Public Speaking
- Public Speaking and Debate
- Psychology
- Social Sciences
- Sociology
- Social Sciences
- Social Sciences

REQUIREMENTS:
1. Unit Requirement: Minimum of 60 semester units, courses numbered 1-99 at Shasta College.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 based on all college work attempted.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.

(Requirements continued on next page)
4. Course Requirements:
   a. Major Field of Study: Select a General Studies emphasis area. All courses in the emphasis area must be completed with a grade of "C" or higher.
   b. General Education: 21-39 units. Select Associate Degree General Education, California State University General Education (CSU GE), or Intersegmental General Education Transfer Curriculum (IGETC). Note: Any student completing the CSU GE or IGETC requirements will also have met the Associate Degree General Education requirements for this degree.
      i. Advanced Placement (AP) examination credit can be used to satisfy Associate Degree General Education, CSU GE, or IGETC.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy Associate Degree General Education or CSU GE.
   Note: The University of California does not accept credit awarded through CLEP.

5. Competency Requirements:
   a. Competence in reading and in written expression is demonstrated by a grade of "C" or higher in one of the following courses. Note: Some degrees require completion of a specific course.
      ENGL 1A College Composition
   b. Competence in mathematics is demonstrated by one of the following criteria:
      1. A grade of "C" or higher in one of the following courses or a mathematics course numbered from 1-99. Note: Some degrees require completion of a specific course.
         MATH 102 Intermediate Algebra
         MATH 110 Essential Math
      2. Performance at or above the level specified below on the following examinations:
         Examination                Score
         College Board Advanced Placement Math Test (CALC or STAT)    3
         Scholastic Aptitude Test – Mathematics (SAT-M)             520 (Beginning 4/95)
         American College Testing (ACT) – Math                   23
         COMPASS Algebra Test                                      54
         Accuplacer – College Level                                45
   c. Multicultural Requirement: 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 group perspectives as well as their similarities and differences.
   d. Computer Literacy Competency 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.
      • 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 IC 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.
      • Minimum of three units to include the coursework options listed below with a grade of C or better:
         - OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
            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.

AS Degree:
The AS degree is primarily oriented to technical, science, and occupational programs. It is intended for the student who plans to enter the workforce after completion of the two-year degree. Students complete the Associate Degree-General Education, the courses in their major, and electives totaling a minimum of 60 units of coursework at the associate and transfer level.

REQUIREMENTS:
1. Unit Requirement: The majority of degrees require a minimum of 60 semester units of coursework, numbered 1-199 at Shasta College. Refer to your degree for the required number of units.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 based on all college work attempted.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
(Requirements continued on next page)
AS Degree requirements continued:

4. Course Requirements:
   a. Major Field of Study: Select an Associate Degree major. All courses in the major must be completed with a grade of “C” or higher.
   b. General Education: 21-39 units. Select Associate Degree General Education, California State University General Education (CSU GE), or Intersegmental General Education Transfer Curriculum (IGETC). Note: Any student completing the CSU GE or IGETC requirements will also have met the Associate Degree General Education requirements for this degree.
      i. Advanced Placement (AP) examination credit can be used to satisfy Associate Degree General Education, CSU GE, or IGETC.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy Associate Degree General Education or CSU GE. Note: The University of California does not accept credit awarded through CLEP.

5. Competency Requirements:
   a. Competence in reading and in written expression is demonstrated by a grade of “C” or higher in one of the following courses. Note: Some degrees require completion of a specific course. 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 one of the following courses or a mathematics course numbered from 1-99. Note: Some degrees require completion of a specific course. MATH 102 Intermediate Algebra MATH 110 Essential Math
   c. Multicultural Requirement: Courses in the Multicultural 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 group perspectives as well as their similarities and differences.
      1. A grade of “C” or higher in one of the following courses or a mathematics course numbered from 1-99. Note: Some degrees require completion of a specific course. ENGL 10A, 10B, 18, 20, 24
      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
         - COMPASS Algebra Test 54
         - Accuplacer – College Level 45
   d. Computer Literacy Competency 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.
      - 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 IC² 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.
      - Minimum of three units to include the coursework options listed below with a grade of C or better:
         • 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 IC² 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.
         • Minimum of three units to include the coursework options listed below with a grade of C or better:
            - 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.

AA Degree –Theatre Arts:

Designed for students desiring a two-year degree to prepare to enter the workforce or continue in their current career. Students complete the Associate Degree-General Education, the “Core” courses in their major, and 60 units of coursework at the associate and transfer level. This Theatre Arts Degree is proposed to be replaced by an Associate of Arts Degree for Transfer in 2013-14. Students are advised to consult a counselor before choosing the existing Theatre Arts Degree.

REQUIREMENTS:

1. Unit Requirement: Minimum of 60 semester units of coursework, numbered 1-199 at Shasta College.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 based on all college work attempted.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
4. Course Requirements:
   a. Major Field of Study: All courses in the major must be completed with a grade of “C” or higher.
   b. General Education: 21-39 units. Select Associate Degree General Education, California State University General Education (CSU GE), or Intersegmental General Education Transfer Curriculum (IGETC). Note: Any student completing the CSU GE or IGETC requirements will also have met the Associate Degree General Education requirements for this degree.
      i. Advanced Placement (AP) examination credit can be used to satisfy Associate Degree General Education, CSU GE, or IGETC.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy Associate Degree General Education or CSU GE. Note: The University of California does not accept credit awarded through CLEP.

5. Competency Requirements:
   a. Competence in reading and in written expression is demonstrated by a grade of “C” or higher in one of the following courses. Note: Some degrees require completion of a specific course. 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 one of the following courses or a mathematics course numbered from 1-99. Note: Some degrees require completion of a specific course. MATH 102 Intermediate Algebra MATH 110 Essential Math

(Requirements continued on next page)
Note: Students also prepare to transfer to many other majors at four-year universities by completing the IGETC or CSU GE certificate and the major preparation courses listed at www.assist.org.
### Shasta College 2013-14

#### Certificates

- Accounting Clerk/Bookkeeper
- Agriculture-Equine Science
- Ag-Equipment Operations and Maintenance
- Agriculture-Horticulture
  - Horticulture and Landscaping Program
  - Irrigation
  - Landscape and Turf Management
- Retail Nursery Sales
- Agriculture-Natural Resources
- Agriculture – Pest Control Advisor Preparation*
- Applied Geographic Information Systems
- Automotive Technology
- Automotive Chassis
- Automotive Electrical-Electronics
- Automotive Engine Performance
- Automotive Engine Repair
- Automotive Heating-Air Conditioning
- Automotive Powertrain
- Business Administration – Business Entrepreneurship
- Business Retailing
- Computer & Information Systems
  - Cisco Networking
  - Network Administration
  - Web Design
  - Windows Server
- Computer Maintenance
- Construction Technology
- CSU - General Education
- Customer Service Academy
- Diesel Technology
- Dietary Service Supervisor
- Early Childhood Education
- ECE-Family Childcare
- Firefighter 1 Certificate
- Firefighter 2 Certificate
- Fire Tech-Wildland Firefighter 1 Academy
- Hospitality
  - Baking – Culinary Arts Emphasis
  - Bartender – Culinary Arts Emphasis
  - Dining Room Management – Culinary Arts Emphasis
  - Dining Room Staff – Culinary Arts Emphasis
  - Line Cook – Culinary Arts Emphasis
  - Winemaking and Marketing
- Hospitality Management
  - Culinary Arts Concentration
  - Hotel/Restaurant Management Concentration
- Industrial Technology
- IGETC – General Education
- Life Management
- Music
- Nurse Aide/Home Health Aide
- Nursing-Vocational Nursing
- Office Administration
  - Administrative Office Assistant
  - Administrative Office Professional
  - Health Information Management
- Transition Certificate for Students with Disabilities
- Watershed Restoration
- Water/Wastewater Treatment
- Welding

*Pending Chancellor’s Office Approval

*6/5/13*
Shasta College 2013-2014
Associate Degree – General Education

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 and 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 Rationality; English Composition; 4-b. Oral Communication; 4c. 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. 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.

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.

3. HUMANITIES:  Three (3) units required. Courses in the Humanities GE area are those 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 contrast, theories that philosophers have used to understand the nature of reasoning, reality and value.

4. LANGUAGE AND RATIONALITY: Courses in the Language and Rationality GE Area are those 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.

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.

Page 5-8
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; and will be able to demonstrate oral competency by constructing messages appropriate to particular communication situations covered in their particular courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Department</th>
<th>Title</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 10 Interpersonal Communication*</td>
<td>CMST</td>
<td>CMST 30 Oral Interpretation</td>
<td>CMST 54 Small Group Comm.</td>
</tr>
<tr>
<td>CMST 20 Intercultural Communication*</td>
<td>CMST</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**

<table>
<thead>
<tr>
<th>AS Level Math :</th>
<th>MATH 9 Survey of Calculus</th>
<th>Other acceptable courses (if math competency has been satisfied):</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 102 Inter Algebra</td>
<td>MATH 10 Plane Trigonometry</td>
<td>CIS 2 Intro Computer Science</td>
</tr>
<tr>
<td>MATH 110 Essential Math</td>
<td>MATH 11 Patterns of Math</td>
<td>CIS 60 Visual Basic Programming</td>
</tr>
</tbody>
</table>

**Other Math Courses:**

<table>
<thead>
<tr>
<th>MATH 14 Statistics</th>
<th>MATH 17 Calculus for Soc/Life Science</th>
<th>MATH 41AB Conc./Elem Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13 College Algebra</td>
<td>MATH 60 Visual Basic Programming</td>
<td>MATH 63 Assembler Lang Program</td>
</tr>
</tbody>
</table>

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 compare and contrast perspectives of various cultural groups as defined by religion, ethnicity, race, gender, class or other important social categories; or identify “at risk” 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 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:**

<table>
<thead>
<tr>
<th>ANTH 2 Cultural Anthropology*</th>
<th>ENGL 18 African American Lit*</th>
<th>HIST 2/3 World Civilization*</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 14 Religion/Myth/Ritual*</td>
<td>ENGL 20 World Mythology*</td>
<td>PSYC 20 Cross Cultural Psychology*</td>
</tr>
<tr>
<td>ANTH 25 Cult/Hist North Am Indian*</td>
<td>ENGL 24 Multicultural Lit*</td>
<td>HIST 36 History of the Far East*</td>
</tr>
<tr>
<td>ART 4 World Art *</td>
<td>GEOG 1B Cultural Geog*</td>
<td>SOC 25 Sociology of Minorities*</td>
</tr>
<tr>
<td>CMST 20 Intercultural Comm.*</td>
<td>GEOG 7 California Geog*</td>
<td>MUS 14 World Music*</td>
</tr>
<tr>
<td>ENGL 10A/B World Lit*</td>
<td>GEOG 8 World Regional Geog*</td>
<td>POLS 20 Politics/Developing World*</td>
</tr>
</tbody>
</table>

**LIVING SKILLS:**

<table>
<thead>
<tr>
<th>AGNR 11 Environ. Ethics</th>
<th>FSS 25 Nutrition</th>
<th>PSYC 5 Human Sexuality</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 10 Intro./Business</td>
<td>FSS 26 Nutrition/Life Span</td>
<td>PSYC 14 Under.Hum. Beh</td>
</tr>
<tr>
<td>BUAD 45 Human Relations/Job</td>
<td>FSS 46 Personal Finance</td>
<td>REGN 20-33 Med Sur Nrs II/III</td>
</tr>
<tr>
<td>ECE 1 Human Development</td>
<td>FSS 60 Life Management</td>
<td>SOC 22 Sociology of Aging</td>
</tr>
<tr>
<td>ECE 2 Child/Family/Community</td>
<td>HLTH 1 Health and Wellness#</td>
<td>STU 1 College Success</td>
</tr>
<tr>
<td>ECE 9 Child Growth &amp; Dev.</td>
<td>HLTH 2 Nutrition and Fitness</td>
<td></td>
</tr>
<tr>
<td>FSS 16 Marriage and Family</td>
<td>HLTH 3 Substance Abuse Awareness</td>
<td></td>
</tr>
<tr>
<td>FSS 18 Adult Ed/Aging</td>
<td>PE 4 Lifestyle Fitness</td>
<td></td>
</tr>
</tbody>
</table>

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 compare and contrast perspectives of various cultural groups as defined by religion, ethnicity, race, gender, class or other important social categories.

<table>
<thead>
<tr>
<th>ADJU 24 Multicult Issues/Law Enf</th>
<th>ENGL 10A World Lit (to 1500)</th>
<th>GERM 1, 2, 3, 4 German</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2 Cultural Anth</td>
<td>ENGL 10B World Lit (after 1500)</td>
<td>HIST 2 World Civ to 1500 C.E.</td>
</tr>
<tr>
<td>ANTH 14 Rel, Myth &amp; Ritual</td>
<td>ENGL 18 African Amer Lit</td>
<td>HIST 3 World Civ 1500 to Present</td>
</tr>
<tr>
<td>ANTH 25 Cult/Hist North Am Indian</td>
<td>ENGL 20 World Mythology</td>
<td>HIST 25 African American History</td>
</tr>
<tr>
<td>ART 4 World Art</td>
<td>ENGL 24 Multicultural Perspec/Amer Lit</td>
<td>HIST 35 History/Mexican Americans</td>
</tr>
<tr>
<td>ASL 1, 2, 3, 4 American Sign Lang</td>
<td>FREN 1, 2, 3, 4 French</td>
<td>HIST 36 History/Far East</td>
</tr>
<tr>
<td>CHIN 1 Mandarin Chinese</td>
<td>GEOG 1B Cultural Geography</td>
<td>HIST 38 History/World Religions</td>
</tr>
<tr>
<td>CMST 20 Intercultural Comm.</td>
<td>GEOG 7 California Geography</td>
<td>JAPN 1, 2, 3, 4 Japanese</td>
</tr>
<tr>
<td>ECE 28 Teach Div. Society</td>
<td>GEOG 8 World Regional Geog</td>
<td>MUS 14 World Music</td>
</tr>
</tbody>
</table>

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.
- 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.
- Possess IC² 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.
- Minimum of three units to include the coursework options listed below with a grade of C or better:
  - OAS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (PowerPoint).
  - Note: MOS or MCAS certification will substitute for the equivalent software class.

6/5/13
Shasta College 2013-2014
California State Universities – 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.

**A1: Oral Communication**
CMST 10: Interpersonal Communication
CMST 54: Small Group Communication
CMST 60: Public Speaking

**A2: Written Communication**
ENGL 1A: College Composition

**A3: Critical Thinking**
ENGL 1B: Literature & Composition
ENGL 1C: Crit. Reasoning/Reading/Writing


**CATEGORY B:** Students shall select a minimum of nine (9) units in the physical universe and its life forms and in mathematical concepts and quantitative reasoning. Students shall select at least three units from each area. One of the courses must have a laboratory. Additional courses may be selected from any area. Courses underlined are designated as laboratory courses.

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

**B2/B3: Life Sciences**
AGAS 19: Principles of Animal Science
AGEH 33: Environ. Horticulture
AGNR 60: Environmental Science
AGNR 61: Environmental Science Lab
ANAT 1: Human Anatomy
ANTH 1: Physical Anthropology

**B4: Mathematical Concepts and Quantitative Reasoning**
MATH 2: Pre-Calculus Mathematics
MATH 3A, 3B, 4A: Calculus
MATH 4B: Differential Equations
MATH 6: Linear Algebra
MATH 8: Finite Mathematics

**CATEGORY C:** Students shall select a minimum of nine (9) units among the arts, literature, philosophy, and foreign languages, with at least one course in the arts and one in the humanities.

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

**C2: Humanities**
ASL 1 American Sign Language 1
ASL 2 American Sign Language 2
ASL 3 American Sign Language 3
ASL 4 American Sign Language 4
CHIN 1: Mandarin Chinese
ENGL 1B: Literature & Composition
**ENGL 10A: World Literature to 1500
**ENGL 10B: World Literature after 1500
**ENGL 10C: World Literature after 1500
ENGL 11A, 11B: Survey of American Lit.
ENGL 12: Intro to Short Fiction
**ENGL 13A, 13B: Survey of English Lit.
ENGL 14: Drama as Lit
ENGL 15: Lit. By/About Women
ENGL 16: Poetry
ENGL 17: Intro to Shakespeare

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Shasta College 2013-14 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**
**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**

D3: Ethnic Studies
**ANTH 25: Culture & Hist/North Am. Indian**
**GEOG 7: California Geography**
**HIST 25: African American History**
**HIST 26: History of Mexico, Imperial Rule and Revolution, 1500-1900**
**HIST 27: History of Mexico, 1900 to the Present**
**HIST 35: History of Mexican Americans**

D4: Gender Studies
SOC 30: Sociology of Gender

D5: Geography
**GEOG 1B: Cultural Geography**
**GEOG 8: World Regional Geography**
**GEOG 7: California Geography**

D6: History
HIST 1A,1B: History of Western Civ.
**HIST 25: African American History**
**HIST 35: History of Mexican Americans**
**HIST 36: History of the Far East**
**HIST 38: History of World Religion**

D7: Interdisciplinary Social or Behavioral Science
AGNR 11: Environmental Ethics
**ECE 1: Human Development**
AGPS 25: California Water
**ECE 9: Child Growth & Development**
**CMST 20: Intercultural Communication**
**PSYC 5: Human Sexuality**

D8: Political Science, Government, and Legal Institutions
ADJU 10: Intro to AOJ
POLS 1: Intro. to Political Science
**POLS 2: Intro to the Developing World**
**POLS 25: Global Politics**

D9: Psychology
PSYC 1A: General Psychology
**PSYC 16: Health Psychology**
PSYC 14: Understanding Human Behavior
**PSYC 17: Abnormal Psychology**
PSYC 15: Social Psychology
**PSYC 20: Cross-Cultural Psychology**

D10: Sociology and Criminology
SOC 1: Introduction to Sociology
SOC 2: Social Problems
**SOC 25: Sociology of Minorities**
SOC 15: Sociology of Mass Media
SOC 30: Sociology of Gender

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 HIST 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:
**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 60: Life Management**
**HLTH 1: Health and 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 16: Health Psychology**
**PSYC 17: Abnormal Psychology**
**PSYC 20: Cross-Cultural Psychology**

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.

Courses taken for CSU General Education are applied to categories based on the General Education list for the year they are completed. This is the approved list for courses taken Fall 2013 through Summer 2014. See www.assist.org for prior years. 6/5/13
IGETC courses must be completed with a "C" grade or better (P is acceptable).

**AREA 1 - ENGLISH COMMUNICATION**

- Group A: English Composition (one course)
  - ENGL 1A: College Composition
- Group B: Critical Thinking/English Composition (one course)
  - ENGL 1B: Literature and Composition
  - ENGL 1C: Critical Reasoning, Reading and Writing

**FOR CSU ONLY:**
- Group C: Oral Communication (one course)
  - CMST 10: Interpersonal Communication
  - CMST 54: Small Group Communication
  - CMST 60: Public Speaking

**AREA 2 - MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING**

- 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. for Social/Life Sciences

**AREA 3 - ARTS AND HUMANITIES**

**ARTS:**

- ART 1: Introduction to Art
- ART 2: History of Western Art
- ART 3: Western Art, Renaissance to Cont.
- ART 4: World Art

**HUMANITIES:**

- ASL 2 American Sign Language 2
- ASL 3 American Sign Language 3
- ASL 4 American Sign Language 4
- ENGL 11A/B: Survey of American Lit.
- ENGL 11C: American Literature
- ENGL 12: Intro to Short Fiction
- ENGL 13A/B: Survey of English Lit.
- ENGL 14: Survey of Drama as Lit.
- 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. Perspectives in Amer Lit

**AREA 4 - SOCIAL AND BEHAVIORAL SCIENCES**

**HUM 2: Exploring Humanities**

**PSYC 1A: General Psychology**

**PSYC 1B: History of Western Civilization**

**PSYC 5: Human Sexuality**

**PSYC 14: Understand. Human Behavior**

**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**

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### 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 Environment
- CHEM 10: Chemistry for Liberal Arts+
- CHEM 11: Chemistry Lab/Liberal Arts+
- CHEM 16: Chemical Problem Solving
- CHEM 70, 71: Organic Chemistry
- ESCI 1: Physical 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 13: Environmental Geology
- ESCI 15: Oceanography

**BIOLOGICAL SCIENCES:**
- AGNR 60: Environmental Science
- AGNR 61: Environmental Science Lab
- AGPS 20: Plant Science
- ANAT 1: Human Anatomy
- BOT 1: General Botany
- BIOL 1: Principles of Biology
- BIOL 5: Intro to Human Biology+
- BIOL 6: Intro to Human Biology Lab+
- BIOL 10: General Biology+
- MICR 1: Microbiology
- NHIS 15: Natural History
- PHY 1: Physiology
- ZOOL 1: General Zoology

### 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:

- ASL 1 American Sign Language 1
- CHIN 1: Mandarin Chinese
- FREN 1: Elementary French
- GERM 1: Elementary German
- JAPN 1: Elementary Japanese
- SPAN 1: Elementary Spanish
- RUSS 1: Elementary Russian
- GER 1: Elementary German
- JAP 1: Elementary Japanese
- SPA 1: Elementary Spanish
- RUS 1: Elementary Russian

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

**GROUP 1:**
- 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 2013 through Summer 2014. See www.assist.org for prior years.

6/5/13
Associate of Arts – University Studies

The Associate of Arts degree, University Studies, is a degree program designed for transfer students who plan to obtain a Bachelor’s degree. Completion of Option 1 or Option 2 will satisfy all-lower division general education requirements for the University of California or the California State University, respectively. Option 3 can be utilized with planning to meet the requirements of an independent or out-of-state university. Option 3 can also be used for majors that have many lower division courses required for the major and in cases where the CSU or UC has approved general education modifications. See www.assist.org and a counselor before selecting your GE Option and Area of Emphasis.

Choose one GE Option, one Emphasis, and transferable electives to total 60 units for the AA degree.

- **General Education – Choose Option 1, 2 or 3.**

**OPTION 1: IGETC (Intersegmental General Education Transfer Curriculum)**

Students who are planning to transfer to the University of California system or who are undecided about whether to transfer to a UC or CSU may satisfy general education requirements with IGETC.

1. Complete the 33 – 37 unit IGETC pattern.
2. Complete all IGETC courses with a grade of “C” or better.
3. Complete additional courses from an emphasis to meet the lower division requirements in your major and then electives to reach 60 units. UC transfer students must select all 60 units from courses on the UC transferable course list. (See www.assist.org)
4. Achieve a minimum grade point average of 2.0. [UC will require a minimum transfer GPA of 2.4. A higher GPA will be required for admission to most campuses and for high demand majors.] All courses in the area of emphasis must be completed with a C or better.

**OPTION 2: CSU GE (California State Universities – General Education)**

Students who are planning to transfer to one of the 23 campuses of the California State University system may satisfy general education requirements with the CSU pattern.

1. Complete the 39-unit CSU GE pattern.
2. Complete Communication, English, Critical Thinking, and Math requirements (Area A1, A2, A3 and B4) each with a grade of “C” or better.
3. Recommend completion of HIST 17A or 17B; and POLS 2 prior to transfer. These two courses are CSU graduation requirements and may be included as part of the 39-unit pattern.
4. Complete additional courses from an emphasis to meet the lower division requirements in your major and then electives to reach 60 units.
5. Achieve a minimum grade point average of 2.0. [A higher GPA will be required for admission to some campuses and for high demand and impacted majors.] All courses in the area of emphasis must be completed with a C or better.

**OPTION 3: Independent, Out-of-state universities, and high unit/specialized majors**

Complete 30 units to satisfy a GE-modified plan as indicated below.

<table>
<thead>
<tr>
<th><strong>CSU GE Pattern:</strong></th>
<th><strong>IGETC GE Pattern:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Select one course from each Category:</strong></td>
<td><strong>Select one course from each Area:</strong></td>
</tr>
<tr>
<td>CATEGORY A1: Oral Communication</td>
<td>AREA 1–GROUP A English Composition</td>
</tr>
<tr>
<td>CATEGORY A2: English Composition</td>
<td>AREA 1–GROUP C Oral Communication</td>
</tr>
<tr>
<td>CATEGORY B1 or B2: Science course</td>
<td>AREA 2 Mathematical Concepts</td>
</tr>
<tr>
<td>CATEGORY B4: Transfer-level math course</td>
<td>AREA 3 Arts or Humanities</td>
</tr>
<tr>
<td>CATEGORY C1 or C2: Arts or Humanities</td>
<td>AREA 4 Social and Behavioral Sciences</td>
</tr>
<tr>
<td>CATEGORY D: Social, Political and Economic institutions, and Behavior</td>
<td>AREA 5 Physical or Biological Sciences</td>
</tr>
</tbody>
</table>

Select additional courses from categories 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.

- **Multicultural requirement**
- **Computer competency requirement**
- **Electives:** Complete transferable electives to total 60 or more transferable units.
- **Course requirements:** All courses in the area of emphasis must be completed with a C or better.

### Areas of Emphasis

#### University Studies: Agriculture Sciences – 18 units

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

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

- AGAB 51 Agriculture Accounting
- AGAB 54 Agriculture Economics
- AGAS 11 Livestock Feeding and Nutrition
- AGAS 19 Principles of 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, 9A, 58, 94; AGAS 10, 11, 15, 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, 71, 72, 94; AGEQ 12, 13, 14, 21; AGMA 42, 44; AGNR 1, 6, 11, 12, 50, 51, 52, 53, 55, 60, 61, 64, 65, 66A, 69, 70, 83, 94; AGPS 25, AGSA 50, 56; AGVETT 16; AGVIT 80, 81; CHEM 2B; MATH 14

#### University Studies: 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

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University Studies: Behavioral Science – 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

University Studies: 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
- ZOOL 1 General Zoology
- CHEM 1A General Chemistry
- CHEM 1B General Chemistry

University Studies: Business Administration – 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

University Studies: 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, 28, 52

University Studies: Criminal Justice – 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

University Studies: Earth System Science – 22 units
Earth System Sciences represents an emerging trend in the sciences and many universities offer a degree or option along this track (i.e. Earth Science, Planetary Science). This academic plan is intended to support the transfer student interested in the bachelor’s degree as it includes courses that define major portions of the Earth System, including geosphere, hydrosphere, atmosphere, and biosphere focused courses, and Earth’s position in space.

Complete the following course:
- 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
  - NHS 15 Natural History
  - PHYS 2B General College Physics

- Courses from supporting disciplines:
  - AGNR 1
  - AGNR 83
  - CIS 1
  - GEOG 10
  - MATH 3B, 14
University Studies: Humanities – 18 units

These courses emphasize the study of cultural, literary, humanistic activities and artistic expression of human beings. With careful planning, the Humanities emphasis will satisfy the lower division major courses to transfer to a university and earn a Bachelor's degree in the various fields of Humanities.

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

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

University Studies: Language Arts – 18 units

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

Select 18 transferable units from at least two areas:

- CMST 10, 20, 30, 40, 54, 60
- ENGL 1B, 1C, 10AB, 11AB, 12, 13AB, 14, 15, 16, 17, 18, 19, 20, 24, 25, 31, 33, 36, 91
- Foreign Languages:
  - ASL 1, 1L, 2, 2L, 3, 4
  - 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
- JOUR 21, 27, 29

University Studies: Liberal Studies –Teaching Prep – 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. See a counselor for this major– bachelor's degree major students select to prepare as an elementary school teacher and earn a multiple subjects credential.

Complete the following:

- CMST 60 Public Speaking
- PHSC 1 and/or Physical Science Survey
- ESCI 12 Earth Science Survey
- BIOL 10 General Biology
- BIOL 10L General Biology Laboratory
- 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
- EDTE 51, 52, 61, 62, 71, 72, 73
- GEOG 7
- HIST 3, 17B

University Studies: 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

University Studies: Meteorology/Climatology – 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
- CIS 1
- GEOG 10
- MATH 3B, 14

University Studies: Multicultural Studies – 18 units

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

Select 18 units from at least 3 different disciplines:

- ANTH 2, 14, 25
- ART 1
- CMST 20
- ENGL 10A, 10B, 18, 20, 24
- GEOG 1B, 5, 7, 8
- HIST 25, 35, 36, 38
- POLS 20, 25
- PSYC 20, 41
- SOC 25

University Studies: Natural Sciences – 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
- AGPS 20
- ANAT 1
- ASTR 1
- BIOL 1, 5, 6, 10, 11, 12
- 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
- MICRO 1
- NHIS 15
- PHSC 1
- PHY 1
- PHYS 2A, 2B, 4A, 4B, 4C
- ZOOL 1
University Studies: Oceanography – 22 units
This degree plan identifies courses needed for a student to transfer into any of the marine sciences. The associate degree emphasizes a multidisciplinary approach as a foundation that can then be applied to an Oceanography bachelor’s degree or a more specialized bachelor’s degree such as Marine Biology or Marine Fisheries.

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

Select the remaining 8 units from the following transferable courses to include at least one additional science course:

Related Science Courses:
- AGNR 60/61
- BIOL 12
- CHEM 1B
- ESCI 10, 17, 37, 38
- NHIS 15, 65
- PHYS 2B

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

University Studies: Physical Education – 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 26
- HLTH 1, 2, 3
- KINES 1, 2
- MATH 14 or 2
- PEAT 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 23, 24, 25, 26, 29, 30
- PHY 1
- PHYS 2A, 2B
- PSYC 1A

University Studies: Physical Sciences – 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 9A

University Studies: 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

University Studies: Science Teacher – Earth – 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
- GEOG 10
- MATH 3B, 14

University Studies: Social Sciences – 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
- ECON 1A, 1B
- MATH 14
- POLS 1 or 25
- PSYC 1A
- SOC 1

Select the remaining 12 units from the following list:
- ANTH 1, 2, 5, 14, 25
- ARCH 3, 4A
- ECE 1, 2, 9
- ECON 1A, 1B
- FSS 16, 18
- GEOG 1A, 1AL, 1B, 5, 7, 8
- HIST 1A, 1B, 2, 3, 17A, 17B, 25, 35, 36, 38, 40, 55, 57
- MATH 14
- POLS 1, 2, 20, 25
- PSYC 1A, 5, 14, 15, 16, 17, 20, 25, 41, 46
- SOC 1, 2, 15, 22, 25, 30, 70

University Studies: World Languages – 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:
- ASL 1, 2, 3, 4
- FREN 1, 2, 3, 4
- GERM 1, 2, 3, 4
- JAPN 1, 2, 3, 4
- RUSS 1, 2, 3, 4
- SPAN 1, 2, 3, 4

Select the remaining 0 – 5 units from:
- ASL 1, 1L, 2, 2L, 3, 4
- ENGL 10AB, 25
- FREN 1, 2, 3, 4
- GERM 1, 2, 3, 4
- JAPN 1, 2, 3, 4
- RUSS 1, 2, 3, 4
- SPAN 1, 2, 3, 4, 19, 20
Areas of Emphasis

**General Studies: Agriculture Trades – 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, 9A, 58
- **AGAS** 10, 11, 15, 19, 30
- **AGAB** 51, 53, 54
- **AGEH** 22, 23, 26, 27, 28, 29, 31, 31.1, 31.2, 31.3, 33, 34, 35, 36, 38, 39, 40, 41, 44, 45, 46, 60, 71, 72, 122, 125, 130
- **AGEQ** 12, 13, 14, 21, 109, 111, 113
- **AGMA** 42, 44
- **AGNR** 1, 6, 11, 12, 50, 51, 52, 53, 55, 60, 61, 64, 65, 66A, 69, 70, 83, 173, 174, 176
- **AGPS** 20, 24, 25, 126
- **AGSA** 50, 56
- **AGVETT** 16
- **AGVIT** 80, 81

**General Studies: Business - Basic Business – 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, 66, 71, 72, 80, 91, 92, 106, 120

Choose 0-6 units from the following:

- **BUAD** 76, 77, 176
- **CIS** 1
- **DSS** 10, 63
- **HOSP** 10, 20, 35, 40, 45, 50, 60, 65
- **REAL** 30
- **ECON** 1A, 1B

**General Studies: Climatological and Meteorological Studies – 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 substantial training in the physical sciences. 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
- **ECON** 10
- **PHYS** 14
- **AGNR** 1, 83

**General Studies: Coastal Oceanographic Studies – 20 units**
This degree is designed to focus the student’s studies on coastal marine environments. The plan includes core and supporting courses 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
- **ECON** 10
- **MATH** 14
- **NHIS** 15

**General Studies: EMS – Emergency Medical Response – 18 Units**
This degree is directed at students who will be working as Emergency Medical Technicians. Additionally, this degree could be used as a general preparation program for those students who will be attending a Paramedic certification program.

Complete the following:

- **FAID** 175

And select 13 units from the list below:

- **ANAT** 1
- **BIOL** 5, 6
- **FAID** 132, 133
- **FIRS** 104, 120
- **FSS** 25
- **MICR** 1
- **PHY** 1

**General Studies: Fire – Fire Investigation – 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 disciplines 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.

Complete the following:

- **FIRS** 71, 86, 189

Select 10 units from the list below:

- **ADJU** 16, 20
- **CHEM** 2A
- **FIRS** 191
- **FTWL** 101
- **FTWP** 114
- **PHYS** 2A

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**Chapter 5 – Degrees and Certificates**

### General Studies: Fire – Fire Service Command, Company Officer – 18 Units

While available to anyone, this degree is designed for students who have been working as Firefighter/Engineers (paid or volunteer) and intend on becoming Engine Captains. Additionally, this degree supports wildland firefighters who are, or will be working at the Crew/Engine/Dozer/Squad Boss 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 team development, group dynamics/psychology, fire administration or similar disciplines.

Complete the following:
- **FIRS** 85, 87

And select 14 units from the list below:
- **FIRS** 100, 108, 135, 136
- **FTWO** 114, 121, 135
- **FTWL** 102, 103

### General Studies: Fire – Fire Service Leadership – 18 Units

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

Complete the following:
- **FIRS** 180

And select 15.5 units from the list below:
- **ADJU** 42
- **CMST** maximum of 3 units
- **FIRS** 113
- **FTWO** 115, 134
- **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** 45, 61, 82, 83, 84, 85, 86, 87, 88, 89, 90

### General Studies: Fire – Fire/Rescue Technologies – 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** 79, 86

And select 12 units from the list below:
- **FIRS** 108, 145, 146, 147, 148, 149
- **FTWL** 101, 102, 103

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 – 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
- **MATH** maximum of 3 units at or above the MATH 102 level
- **PHYS** maximum of 3 units

### General Studies: Fire – Wildland Fire Reconnaissance – 18 Units

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

Select 18 units from the list below:
- **BOT** 1
- **ESCI** 14
- **FIRS** 156
- **FTWL** 110
- **FTWO** 112, 128, 132
- **GEOG** 11

### General Studies: Food and Beverage and Lodging Management – 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** 45, 46, 48, 49, 50, 55, 59, 60, 65, 66, 73, 74, 75, 76, 78, 80, 88, 159, 161, 172
- **DSS** 10, 63
- **HOSP** 10, 20, 35, 40, 45, 50, 60, 65

Select the remaining 0 – 6 units from the following:
- **ACCT** 2, 4, 101, 102, 103, 104, 194
- **BUAD** 6, 8, 10, 40, 42, 68, 71, 72, 80, 81-90, 91, 106, 120, 166
- **CIS** 1, 83, 86
- **OAS** 10, 11, 12

### General Studies: Geologic Field Studies – 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 26,27,32,33,34,35,36,37,38,42,43,44,45,46**
- 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
- **GEOG** 10
- **MATH** 14
- **NHIS** 15

### General Studies: Health – 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)** 10,15,20,21,30,31,40,41,50
- **FAID** 130, 132, 133, 175, 178
- **FSS** 25
- **HLTH** 1, 2, 3
- **HEOC** 10, 100, 160,180,181
- **KINES** 1, 2
- **OAS** 110, 111
- **PE** 4, 35, 36

*(General Studies: Health requirements continued on next page)*
(General Studies: Health requirements continued):

PEAT (activity)* 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 29, 30,

VOCN  160, 161, 162

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

General Studies: Human Development – 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:
ENGL 1B, 1C, 10AB, 11AB, 12, 13AB, 14, 15, 16, 17, 18, 19, 20, 24,
CMST 10, 20, 30, 40, 54, 60

Select the remaining 13 - 15 units from the following:
ADO 10, 11, 15, 16, 17, 18, 20, 21, 22, 23, 24, 26, 30, 40, 41, 42, 50, 51, 52, 60, 70, 74, 81, 153

General Studies: Humanities – 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 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 languages):
ART 1, 2, 3, 4, 6, 12, 13, 15, 16, 17, 21A, 21B, 23, 26A, 26B, 29A, 29B, 31A, 31B, 35A, 35B, 45, 46, 50A, 55A, 55B, 57, 60A, 60B, 60C, 80A, 80B, 110, 111, 121, 122, 123, 124, 125, 126

ASL 1, 2, 2L
CMST 10, 20, 30, 40, 54, 60
DAN (Up to 3 units of Dance courses may apply)
ENGL 1B, 1C, 10AB, 11AB, 12, 13AB, 14, 15, 16, 17, 18, 19, 20, 24,
CMST 10, 20, 30, 40, 54, 60
FREN 1, 2, 3, 4
GERM 1, 2, 3, 4
HUM 2, 4, 70
JAPN 1, 2, 3, 4, 19, 20
JOUR 21, 24, 27, 29
MUS 1, 2, 3, 4, 5, 10, 11, 14, 21A, 22A, 22B, 25A, 29, 30, 31, 33, 35,
PHIL 6, 7, 8
RUSS 1, 2, 3, 4
SPAN 1, 2, 3, 4, 19, 20, 151
THTR 1, 5, 6, 8, 12, 13, 23, 26, 29, 30, 31, 34, 41, 42, 50, 51, 52, 60,

General Studies: Industrial Technologies – 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 42, 44
AUTO 1, 10, 20, 21, 130, 131, 147, 150, 152, 161, 162, 163, 180, 181
CONS 45, 46, 47, 48, 52, 53, 54, 55, 56, 84, 148, 149, 150, 152, 161, 179
DIES 48, 49, 158, 160, 161, 162, 164, 166, 170
ENER 50, 101, 102, 151
ENGH 1A, 1B, 2, 20, 21, 22, 24, 25, 26, 27, 29, 30, 31, 32, 33, 37, 38,
IND 110, 111, 158, 160, 161, 162, 164, 166, 170
WELD 56, 70, 173, 170, 171, 174, 175 176, 178, 182, 184, 186, 188
WTT 177, 180, 181, 183, 184, 186

Select 18 units from at least three areas:
AGAS 19
AGEH 33
AGNR 60
AGPS 20

General Studies: Office and Computer Technologies – 18 units
This emphasis allows students to explore many areas of office management, and for current law enforcement personnel to earn an associate degree for advancement in the field.

Select the remaining 13 - 15 units from the following:
ACCT 101, 102, 103, 104
BUAD 10, 45, 66, 71, 72

General Studies: Social Sciences – 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, 4A, 5A
ECCE 1, 2, 9
ECON 1A, 1B
FSS 16, 18
GEOG 1A, 1B, 2, 3, 17A, 17B, 25, 35, 36, 38, 40, 55, 57
HIST 1A, 18, 20, 25
PSYC 1A, 8, 14, 15, 16, 17, 20, 41, 46
SOCI 1, 2, 15, 22, 25, 70

General Studies: Natural Sciences – 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
AGPS 20

General Studies: Agriculture – 18 units
The Agriculture emphasis permits the student to explore courses in the field of public safety as an 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:
AGMA 42, 44
AUTO 1, 10, 20, 21, 130, 131, 147, 150, 152, 161, 162, 163, 180, 181
CONS 45, 46, 47, 48, 52, 53, 54, 55, 56, 84, 148, 149, 150, 152, 161, 179
DIES 48, 49, 158, 160, 161, 162, 164, 166, 170
ENER 50, 101, 102, 151
ENGH 1A, 1B, 2, 20, 21, 22, 24, 25, 26, 27, 29, 30, 31, 32, 33, 37, 38,
IND 110, 111, 158, 160, 161, 162, 164, 166, 170
WELD 56, 70, 173, 170, 171, 174, 175 176, 178, 182, 184, 186, 188
WTT 177, 180, 181, 183, 184, 186

General Studies: Language Arts – 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:
ASL 1, 2, 2L, 3, 4, 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

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.
Administration of Justice

Associate in Science for Transfer:

**PROGRAM DESCRIPTION:** This course of study prepares students for transfer to complete work for a bachelor’s degree in criminal justice or economic crime investigation. Students will be able to describe the individual functions and components of the modern criminal justice system; use introductory concepts of legal research to locate, analyze, and discuss the content of statutory and case law; and explain the underlying cause of antisocial and criminal behavior. Proper selection of curriculum electives further enables students to study other academic disciplines, such as political science, sociology, and public administration. This program is appropriate for students considering law school as well as certain careers in law enforcement.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this degree, the student should be able to:
1. Identify and apply communication skills when interacting with all people.
2. Identify the need for understanding diverse populations in the criminal justice field and establish strategies for effectively communicating with those diverse populations.
3. Identify the cultural differences found in most communities and apply methods of effectively bridging those differences.
4. Demonstrate and apply critical thinking skills in dealing with ethical decision making within the criminal justice system.
5. Demonstrate the ability to locate resources which enable the resolution of problems within the community and the participants of the criminal justice system.
6. Recognize the major impact ethics and morality has on the citizens the law enforcement profession serves and the daily interaction with others within the criminal justice system.
7. Develop effective writing skills to properly document law enforcement priorities.
8. Demonstrate an understanding of the theory and application of legal enforcement rules, regulations, and applicable laws.
9. Demonstrate the ability to make the correct decision during critical life-threatening situations.

**REQUIREMENTS:**
In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Administration of Justice for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

**REQUIRED CORE:**
- **ADJU 10** Introduction to Administration of Justice 3
- **ADJU 15** Concepts of Criminal Law 3
- **LIST A (Choose two courses from the following):** 6
  - ADJU 16 Legal Aspects of Evidence (3)
  - ADJU 17 Principles and Procedures of the Justice System (3)
  - ADJU 18 Community Relations (3)
  - ADJU 20 Principles of Investigation (3)
  - ADJU 22 Juvenile Procedures (3)
  - ADJU 40 Introduction to Corrections (3)
- **LIST B (Choose two courses from the following):** 6-7
  - MATH 14* Introduction to Statistics (4)
  - PSYC 1A* General Psychology (3)
  - SOC 1* Introduction to Sociology (3)

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

**ASSOCIATE IN SCIENCE IN ADMINISTRATION OF JUSTICE FOR TRANSFER DEGREE REQUIREMENTS:**
- **Major**
  - 18-19
- **General Education**
  - 37-39*
- **General Electives**
  - 10-12*

**Degree Total Will Not Exceed 60 Units**

*Number will vary depending on units that double count.

Business Administration

Associate in Science for Transfer:

**PROGRAM DESCRIPTION:** The Associate in Science in Business Administration for Transfer degree is designed to provide students with the common core of lower division courses required 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. The Associate in Science in Business Administration for Transfer degree aligns with the CSU Bachelor of Science in Business Administration.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this degree, the student should be able to:
1. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
2. Identify and illustrate fundamental accounting concepts, classifications, cost systems, cost-volume-profit relationships, budgeting and profit planning to support planning, control and decision making activities of management.
3. Prepare and process payroll records and payroll tax returns in compliance with applicable federal and state laws and regulations.
4. Apply the Internal Revenue Code and related Treasury Regulations as they relate to individual, partnership and corporation income taxes; prepare simple individual income tax returns.
5. Utilize their ability to identify and apply business and finance concepts to advance into upper division coursework as business majors in the fields of accounting, finance, marketing, management and information technology and services.

**REQUIREMENTS:**
In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Business Administration for Transfer degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

**REQUIRED CORE:**
- **ACCT 2** Introduction to Financial Accounting 3
- **ACCT 4** Introduction to Managerial Accounting 3
- **BUAD 6** Business Law I 3
- **ECON 1A #** Principles of Economics (Micro) 3
- **ECON 1B #** Principles of Economics (Macro) 3
- **LIST A: (Choose one course)** 3-4
  - MATH 8*# Finite Mathematics (3)
  - MATH 9*# Survey of Calculus (4)
  - MATH 14*# Introduction to Statistics (4)
- **LIST B: (Choose two courses)** 6-8
  - Any List A course not used above
  - BUAD 10 Introduction to Business (3)
  - BUAD 66 Business Communications (3)
  - CIS 1 Computer Literacy Workshop (3)

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

**ASSOCIATE IN SCIENCE IN BUSINESS ADMINISTRATION FOR TRANSFER DEGREE REQUIREMENTS:**
- **Major**
  - 24-26
- **General Education**
  - 37-39*
- **General Electives**
  - 4-8*

**Degree Total Will Not Exceed 60 Units**

*Number will vary depending on units that double count.
Communication Studies

**Associate in Arts for Transfer:**

**PROGRAM DESCRIPTION:** Communication classes provide students with skills that are essential for other classes and programs at Shasta College and beyond. The Associate in Arts in Communication Studies for Transfer 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. The Associate in Arts in Communication Studies for Transfer degree aligns with the CSU Bachelor of Arts in Communication Studies.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. Identify the role communication plays in academic, social and professional endeavors.
2. Present well-designed, well-researched, well-developed and supported information and persuasive presentations.
3. Demonstrate the tools of advocacy for issues of justice and fairness, with integrity and civility.
4. Demonstrate the skills of critical thinking, recognize common fallacies of thought, demonstrate active listening, conflict management and win-win problem solving essential for both personal relationships and team work.
5. Identify crucial issues affecting intercultural communication, and the adaptations necessary for successful interactions between cultures.

**REQUIREMENTS:**

In addition to the 37-39 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 and a C or better in each major course.

**REQUIRED CORE:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 60#</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CMST 10#</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMST 40*</td>
<td>Argumentation and Debate</td>
<td>3</td>
</tr>
<tr>
<td>CMST 54*</td>
<td>Small Group Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST A (Choose six units from the following):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 20*</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMST 30*</td>
<td>Oral Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>CMST 75</td>
<td>Forensics Workshop</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST B (Choose six units from the following):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 60#</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CMST 10#</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMST 40*</td>
<td>Argumentation and Debate</td>
<td>3</td>
</tr>
<tr>
<td>CMST 54*</td>
<td>Small Group Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST C (Choose three units from the following):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2#</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 21*</td>
<td>Introduction to Mass Communications</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1A#</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1#</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

*May be used to fulfill IGETC requirements. See a counselor.*

**ASSOCIATE IN ARTS IN COMMUNICATION STUDIES FOR TRANSFER DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>18</td>
</tr>
<tr>
<td>General Education</td>
<td>37-39*</td>
</tr>
<tr>
<td>General Electives</td>
<td>8-18*</td>
</tr>
</tbody>
</table>

*Degree Total Will Not Exceed 60 Units

**Early Childhood Education**

**Associate in Science for Transfer:**

**PROGRAM DESCRIPTION:** The Associate of Science Early Childhood Education Transfer degree is designed to provide students with a common core of eight early childhood education courses (approved by the Curriculum Alignment Project) that permit students to transfer smoothly to participating CSU’s to complete a Bachelor’s degree in child development or early childhood education.

The degree is designed to facilitate students’ successful transfer to certain California State University (CSU) campuses that prepare them for advanced study in a variety of graduate programs, as well as a variety of careers such as teaching, Child Development Specialist, Program Directors, and Child Life Specialists. With a BA in ECE/Child Development, students are eligible for the Master Teacher and Site Supervisor levels of the CA Child Development Permit, using the Alternative Qualifications category.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. Exhibit skill in identifying the needs, the characteristics and multiple influences on the development of children birth to age eight.
2. Design, execute and evaluate environments and activities that support positive developmental play and learning outcomes for young children.
3. Establish and maintain safe and healthy learning environments for young children.
4. Observe, document, and use authentic assessment tools as a vehicle for child and program assessment and curriculum design.
5. Utilize ethical standards and professional behaviors that deepen understanding, knowledge, and commitment regarding the ECE profession.
6. Build family and community relationships and understand and value the importance and complex characteristics of families and communities in young children’s development.
7. Evaluate developmentally effective approaches to create positive relationships and supportive interactions as the foundation in working with children and families from diverse societies.
8. Upon completion of a program of study in Early Childhood Education students will, through planned and sequenced field experiences, develop the knowledge, skills and professional dispositions necessary to promote the development and learning of young children across the entire developmental period of early childhood in multiple early childhood age groups and in the variety of settings that offer early care and education.

**REQUIREMENTS:**

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Early Childhood Education for Transfer degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

**REQUIRED CORE:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2*</td>
<td>Child, Family, Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 7</td>
<td>Early Childhood Observation and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ECE 8</td>
<td>Teaching Practicum for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 9*</td>
<td>Child, Growth and Development</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 26</td>
<td>Teaching in a Diverse Society</td>
<td>3</td>
</tr>
</tbody>
</table>

*May be used to fulfill IGETC requirements. See a counselor.*

**ASSOCIATE IN SCIENCE IN EARLY CHILDHOOD EDUCATION FOR TRANSFER DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>26</td>
</tr>
<tr>
<td>General Education</td>
<td>37-39*</td>
</tr>
<tr>
<td>General Electives</td>
<td>0-1*</td>
</tr>
</tbody>
</table>

*Degree Total Will Not Exceed 60 Units

*Number will vary depending on units that double count.
Kinesiology

Added to the online catalog on 8/21/13

Associate in Arts for Transfer:

PROGRAM DESCRIPTION: The Associate in Arts in Kinesiology for Transfer provides students with the opportunity to meet the requirements for transfer to the California State University system in the Kinesiology major. The degree is designed to prepare students for a variety of career options in the field of Kinesiology such as teaching, exercise science, sports medicine, and physical therapy. Current and prospective community college students are encouraged to meet with a counselor to develop an educational plan that best meets their goals and needs.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:

1. Identify and apply the concepts, theoretical principles, and historical and current trends in the field of Kinesiology.
2. Understand how exercise in the form of physical activity contributes to the physiological responses and adaptations of the human body.
3. Apply critical thinking, writing, reading, oral communication, and quantitative and qualitative analysis to skill and movement-related concepts.
4. Identify and apply the scientific principles of movement, exercise, and sport including the knowledge and skill in the listed activity course families of fitness, aquatics, individual sport and team sport.
5. Transfer to the California State University level programs with a comprehensive foundation in Kinesiology courses.

REQUIREMENTS:
In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Kinesiology for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

REQUIRED CORE:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 1*#</td>
<td>5</td>
</tr>
<tr>
<td>KINES 1</td>
<td>3</td>
</tr>
<tr>
<td>PHY 1*#</td>
<td>5</td>
</tr>
<tr>
<td>Movement Based Courses:</td>
<td>3</td>
</tr>
<tr>
<td>(minimum of 3)</td>
<td></td>
</tr>
</tbody>
</table>

Select a maximum of one course from any three of the following areas for a minimum of three units.

Aquatics:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 30A</td>
<td>2</td>
</tr>
<tr>
<td>PE 30B</td>
<td>2</td>
</tr>
<tr>
<td>PE 31</td>
<td>2</td>
</tr>
<tr>
<td>PE 32</td>
<td>2</td>
</tr>
<tr>
<td>PE 37</td>
<td>2</td>
</tr>
</tbody>
</table>

Combatives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 60</td>
<td>2</td>
</tr>
</tbody>
</table>

Fitness and Conditioning:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 11</td>
<td>2</td>
</tr>
<tr>
<td>PE 12A</td>
<td>2</td>
</tr>
<tr>
<td>PE 12B</td>
<td>2</td>
</tr>
<tr>
<td>PE 15</td>
<td>2</td>
</tr>
<tr>
<td>PE 16</td>
<td>2</td>
</tr>
<tr>
<td>PE 17</td>
<td>2</td>
</tr>
</tbody>
</table>

Individual Sports:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 51A</td>
<td>2</td>
</tr>
<tr>
<td>PE 51B</td>
<td>2</td>
</tr>
<tr>
<td>PE 62</td>
<td>2</td>
</tr>
</tbody>
</table>

Team Sports:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 69</td>
<td>2</td>
</tr>
<tr>
<td>PE 70B</td>
<td>2</td>
</tr>
<tr>
<td>PE 71</td>
<td>2</td>
</tr>
<tr>
<td>PE 72</td>
<td>2</td>
</tr>
<tr>
<td>PE 74</td>
<td>2</td>
</tr>
<tr>
<td>PE 75</td>
<td>2</td>
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</table>

LIST A: (Choose one course):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1A*#</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 2A*#</td>
<td>2</td>
</tr>
<tr>
<td>KINES 2</td>
<td>2</td>
</tr>
<tr>
<td>MATH 14*#</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 2A*#</td>
<td>2</td>
</tr>
</tbody>
</table>

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

Psychology

Associate in Arts for Transfer:

PROGRAM DESCRIPTION: This program introduces students to psychology as the scientific study of human behavior and mental processes and the practical application of psychology to personal and social issues. The Associate in Arts in Psychology for Transfer degree is designed to provide students with a common core of lower division courses required to transfer and pursue a baccalaureate (4-year) degree in psychology in the CSU system.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:

1. List and describe the major concepts, vocabulary, theoretical perspectives, and empirical findings of psychology.
2. Describe and apply basic research methods in psychology.
3. Practice critical thinking to solve problems related to behavior and mental processes.
4. Link psychological concepts and principles to relevant practical applications.

REQUIREMENTS:
In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Psychology for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

REQUIRED CORE:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1A*#</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 14*#</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 16*</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 17*</td>
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</tr>
<tr>
<td>PSYC 18*</td>
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<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>PSYC 15*#</td>
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<tr>
<td>PSYC 20*</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 21*</td>
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<table>
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<tbody>
<tr>
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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>ENGL 1B*</td>
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</tr>
<tr>
<td>ENGL 1C</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 19*</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1*#</td>
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<table>
<thead>
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<tr>
<td>BIOL 5*#</td>
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<table>
<thead>
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</thead>
<tbody>
<tr>
<td>BIOL 10 &amp; 10L*#</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 11*#</td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1B*</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1C</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 15*#</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1*#</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>LIST A (Choose one course):</td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1A*#</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 2A*#</td>
<td>2</td>
</tr>
<tr>
<td>KINES 2</td>
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ASSOCIATE IN ARTS IN PSYCHOLOGY FOR TRANSFER DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>23-25</td>
</tr>
<tr>
<td>General Education</td>
<td>37-39</td>
</tr>
<tr>
<td>General Electives</td>
<td>2-9*</td>
</tr>
</tbody>
</table>

*Number will vary depending on units that double count.

ASSOCIATE IN ARTS IN PSYCHOLOGY FOR TRANSFER DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>19-21</td>
</tr>
<tr>
<td>General Education</td>
<td>37-39</td>
</tr>
<tr>
<td>General Electives</td>
<td>18-20</td>
</tr>
</tbody>
</table>

*Number will vary depending on units that double count.
Sociology

**Associate in Arts for Transfer:**

**PROGRAM DESCRIPTION:** 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.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

1. Articulate the sociological perspective on human behavior.
2. Compare and contrast the major theoretical orientations in sociology.
3. Articulate the role of theory and social research methods in sociology.
4. Describe research methodology and critically evaluate sociological data.
5. Integrate content knowledge and cognitive skills, i.e., logical thinking, problem-solving, and critical reasoning, when completing exams, term papers, and additional class assignments.
6. Apply sociological principles that contribute to the foundation for life-long personal growth, development of effective interpersonal and social skills, education, employment and everyday life.

**REQUIREMENTS:**

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Sociology for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

**REQUIRED CORE:**

- **SOC 1**\# Introduction to Sociology 3
- **LIST A**
  - **SOC 2**\# Social Problems 3
  - **MATH 14**\# Introduction to Statistics 4
- **LIST B** (Choose six units from the following):
  - **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):
  - **ART 12**# History of Western Art Since 1400 3
  - **ART 15**# Three Dimensional Design 3
  - **ART 21A** Beginning Freehand Drawing 3

**LIST A** (Choose one course from the following): 3

**LIST B** (Choose three courses from the following): 9

**ART 13** Intermediate Form, Design and Color (3)

**ART 21B** Intermediate Freehand Drawing (3) **OR**

**ART 31A** Beginning Figure Drawing (3)

**ART 29A** Beginning Painting (3)

**ART 35A** Beginning Ceramics (3)

**ART 45** Beginning Glass (3)

**ART 50A** Beginning Printmaking (3)

**ART 55A** Beginning Sculpture (3)

**ART 60A** Beginning Darkroom Photography (3)

**ART 70A** Beginning Digital Photography (3)

**ART 80A** Graphic Design (3)

**ART 35B** Intermediate Ceramics (3)

*May be used to fulfill CSU 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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</tr>
<tr>
<td>General Education</td>
<td>37-39</td>
</tr>
<tr>
<td>General Electives</td>
<td>11-17</td>
</tr>
</tbody>
</table>

**Degree Total Will Not Exceed 60 Units**

*Number will vary depending on units that double count.

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**Studio Arts**

**Associate in Arts for Transfer:**

**PROGRAM DESCRIPTION:** The AA-T in Studio Arts program provides a solid foundation in the fundamentals of art, including conceptual awareness of current issues in art, technical competencies, visual aptitudes, and skills in many areas of human interaction, including relationship building, intercultural competency, critical thinking, information competency, teamwork and leadership. Students develop an understanding of the principles of art and design while investigating concepts and applying these elements to two dimensional compositions and three dimensional forms. The Art program is academically grounded in the liberal arts tradition of cultural studies, history, philosophy, and technical processes. It provides a hands-on, learning by doing environment that gives students experiences and skills to complement many career paths. The AA-T in Studio Arts will align with the CSU Bachelor of Fine Arts and Bachelor of Arts Degrees.

**PROGRAM LEARNING OUTCOMES:**

1. Describe and successfully apply the elements and principles of art and design to two dimensional compositions or three dimensional forms
2. Select appropriate tools and techniques in dealing with a variety of media to demonstrate informed, skilled and sensitive handling in the execution of two dimensional imagery and three dimensional forms.
3. Investigate, develop and employ conceptual themes which clearly and consistently reflect the student’s point of view.
4. Effectively identify and utilize resources for art history research.
5. Articulate in writing his/her objective and subjective understanding of two and three-dimensional works.
6. Orally evaluate the works of fellow students and implement suggestions made through the evaluation of his/her work by others.
7. Transfer to a California State University with a major in Studio Arts.

**REQUIREMENTS:**

- **Online catalog revised on 8/23/13.**

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Studio Arts for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

**REQUIRED CORE:**

<table>
<thead>
<tr>
<th>Required Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ART 3</strong>#</td>
<td>History of Western Arts Since 1400</td>
</tr>
<tr>
<td><strong>ART 12</strong></td>
<td>Beginning Form, Design and Color</td>
</tr>
<tr>
<td><strong>ART 15</strong></td>
<td>Three Dimensional Design</td>
</tr>
<tr>
<td><strong>ART 21A</strong></td>
<td>Beginning Freehand Drawing</td>
</tr>
<tr>
<td><strong>ART 2</strong>#</td>
<td>History of Western Art Through Gothic Period</td>
</tr>
<tr>
<td><strong>ART 4</strong>#</td>
<td>World Art (3)</td>
</tr>
<tr>
<td><strong>LIST A</strong></td>
<td>(Choose one course from the following)</td>
</tr>
<tr>
<td><strong>LIST B</strong></td>
<td>(Choose three courses from the following):</td>
</tr>
<tr>
<td><strong>ART 13</strong></td>
<td>Intermediate Form, Design and Color</td>
</tr>
<tr>
<td><strong>ART 21B</strong></td>
<td>Intermediate Freehand Drawing OR</td>
</tr>
<tr>
<td><strong>ART 31A</strong></td>
<td>Beginning Figure Drawing</td>
</tr>
<tr>
<td><strong>ART 29A</strong></td>
<td>Beginning Painting</td>
</tr>
<tr>
<td><strong>ART 35A</strong></td>
<td>Beginning Ceramics</td>
</tr>
<tr>
<td><strong>ART 45</strong></td>
<td>Beginning Glass</td>
</tr>
<tr>
<td><strong>ART 50A</strong></td>
<td>Beginning Printmaking</td>
</tr>
<tr>
<td><strong>ART 55A</strong></td>
<td>Beginning Sculpture</td>
</tr>
<tr>
<td><strong>ART 60A</strong></td>
<td>Beginning Darkroom Photography</td>
</tr>
<tr>
<td><strong>ART 70A</strong></td>
<td>Beginning Digital Photography</td>
</tr>
<tr>
<td><strong>ART 80A</strong></td>
<td>Graphic Design</td>
</tr>
<tr>
<td><strong>ART 35B</strong></td>
<td>Intermediate Ceramics</td>
</tr>
</tbody>
</table>

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

**Number will vary depending on units that double count.**

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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

Associate in Arts for Transfer:

PROGRAM DESCRIPTION: 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.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Describe the basic elements of dramatic structure and analyze the dramatic components in a theatrical production.
2. Select appropriate monologues and prepare them as audition pieces.
3. Investigate the themes and dramaturgy of the Greek, Roman, Medieval, Renaissance, Elizabethan, Jacobean and Restoration periods of Theatre history and compare and contrast those periods through discussion, papers, and performance analysis.
4. Identify and apply the major components of stagecraft in the implementation of scenery, lighting, costume, makeup, special effects, and production management.
5. Investigate the social, political, and spiritual objectives of theatrical performance through discussions and papers that deal with gender, politics and religion.
6. Evaluate dramatic scripts relative to historical context and contemporary relevance.
7. Develop cooperation skills in working with people from diverse cultures.
8. Transfer to a California State University with a major in Theatre Arts.

REQUIREMENTS:
Online catalog revised on 7/17/13.
In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Theatre Arts for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

REQUIRED CORE:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>THTR 1*#</td>
<td>Introduction to Theatre Arts OR</td>
<td>3</td>
</tr>
<tr>
<td>THTR 8*#</td>
<td>Theatre History I</td>
<td></td>
</tr>
<tr>
<td>THTR 12</td>
<td>Acting I</td>
<td>2</td>
</tr>
<tr>
<td>THTR 16</td>
<td>Acting Lab</td>
<td>1</td>
</tr>
<tr>
<td>Three units from the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>THTR 23</td>
<td>Mainstage Production I</td>
<td></td>
</tr>
<tr>
<td>THTR 26</td>
<td>Mainstage Production II</td>
<td></td>
</tr>
<tr>
<td>THTR 41</td>
<td>Theatre Lab</td>
<td></td>
</tr>
<tr>
<td>THTR 42</td>
<td>Technical Stage Production</td>
<td></td>
</tr>
<tr>
<td>THTR 50</td>
<td>Stage Production</td>
<td></td>
</tr>
<tr>
<td>THTR 70</td>
<td>Repertory Theatre – I</td>
<td></td>
</tr>
<tr>
<td>THTR 74</td>
<td>Repertory Theatre – Technical</td>
<td></td>
</tr>
</tbody>
</table>

LIST A (Choose at least three courses for a 9 unit minimum) 9
Note: There is a 3-unit maximum in Rehearsal and Performance courses, and if you used them in the core, then you cannot use them in List A. There is a 3-unit maximum in Technical Theatre Practicum courses, and if you used them in the core then you cannot use them in List A.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>THTR 30</td>
<td>Stagecraft (3)</td>
</tr>
<tr>
<td>THTR 31</td>
<td>Introduction to Theatrical Design (3)</td>
</tr>
<tr>
<td>THTR 34</td>
<td>Makeup (2) AND Makeup Lab (1)</td>
</tr>
</tbody>
</table>

THTR 81 Playwriting and Script Analysis (3)
Any Rehearsal and Performance or Technical Theatre Practicum course listed in Core but not used for Core requirements (1-3)

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

ASSOCIATE IN ARTS IN THEATRE ARTS FOR TRANSFER DEGREE REQUIREMENTS:

Major 18
General Education 37-39*
General Electives 6-8*

Degree Total Will Not Exceed 60 Units

*Number will vary depending on units that double count.
Accounting Clerk/Bookkeeper

Certificate:

PROGRAM DESCRIPTION: Completion of the Certificate Program will prepare the student for entry-level position in accounts receivable, accounts payable, payroll, and general ledger.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
2. Use integrated accounting software in performing the processes of the accounting cycle and preparing the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
3. Prepare and process payroll records and payroll tax returns in compliance with applicable federal and state laws and regulations.
4. Demonstrate the use of skills relevant for problem solving, decision making and solving ethical dilemmas in the business environment including critical thinking, effective written and oral communication, working effectively in teams and the proficient use of computers for information search, retrieval, problem solving and communication.
5. Identify and explain the current economic indicators regarding inflation, unemployment, monetary and fiscal policy and their effects on consumers and small businesses.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_acct_gainful_employment/.

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<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 66</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 166</td>
<td>Business English</td>
<td>3</td>
</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</td>
<td>3</td>
</tr>
<tr>
<td>OAS 64</td>
<td>Computerized Ten-Key</td>
<td>.5</td>
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<tr>
<td>OAS 166</td>
<td>Records Management</td>
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</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 28.5

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

Administration of Justice

Associate in Science:

PROGRAM DESCRIPTION: 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.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Demonstrate their knowledge of the evolution of the justice system, its objectives, role and trends through discussion and examinations.
2. Demonstrate their knowledge of the basics of California criminal law and the core principles that drive the police and course, through discussion and examinations.
3. Demonstrate their knowledge of the basics of evidence collection, chain of evidence and submission of evidence and legal requirements for the handling of evidence through discussion and examinations.
4. Demonstrate their knowledge of the California Court Criminal System, and court testimony through examination and discussion.
5. Demonstrate their knowledge in the basics of criminal investigation and how the process leads to submission to the District Attorney, court system and corrections, through examination and discussion.
6. Demonstrate their knowledge of how policy/community relations intertwine into community relations through examination and discussion.

DEGREE REQUIREMENTS:

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>
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</table>

RESTRICTED ELECTIVES: (Choose six units) 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<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>Introduction to Corrections</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>
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MULTICULTURAL ISSUES: (Choose two units) 2

<table>
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<tr>
<th>Course Code</th>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ADJU 43</td>
<td>American Diversity</td>
<td>2</td>
</tr>
<tr>
<td>ADJU 44</td>
<td>Diversity of the United States</td>
<td>2</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>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>30</td>
</tr>
<tr>
<td>Additional General Ed.</td>
<td>18</td>
</tr>
<tr>
<td>General Electives</td>
<td>12</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 normal 60 units increased by 6 units.

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 – Agricultural Business

**Associate in Science:**

**PROGRAM DESCRIPTION:** 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. "Agr" 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 fertilizer and seed, equipment and machinery to the crops, feed, production loans, and crop insurance and so on. In the state of California, agriculture is the #1 commodity which further increases our student’s employment opportunities. This degree is designed to give students a broad understanding of the agriculture industry, as it is much easier for a student who has solid foundation in agriculture to be successful in the world of agricultural business as "agr" 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.

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

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and **filining an application for graduation with Admissions and Records**, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. Demonstrate proficiency in accounting procedures using a double-entry bookkeeping system.
2. Organize and prepare reports, presentations, and other information pertaining to managerial procedures.
3. Describe the economic significance of California Agriculture and its relationship to the global economy.
4. Explain supply and demand as it relates to local and regional agriculture business industries.
5. Demonstrate the ability to make logical business decisions based on the analysis of business trends locally, regionally, and globally.
6. Demonstrate proficiency using computers, the Internet, and other technology as they relate to agri-business.
7. Recognize world markets and describe their effect on local agriculture economics.

**DEGREE REQUIREMENTS:**

**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 9A</td>
<td>Agriculture and Natural Resources Leadership</td>
<td>1</td>
</tr>
<tr>
<td>AG 58</td>
<td>Worksite Learning-Agriculture OR</td>
<td>1</td>
</tr>
<tr>
<td>AGB 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>Principles of 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>
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</table>

**RESTRICTED ELECTIVES:** (Choose nine units) 9

**ADDITIONAL GENERAL EDUCATION REQUIRED:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CMST 60*</td>
<td>Public Speaking (3) OR</td>
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<tr>
<td>CMST 54*</td>
<td>Small Group Communication (3)</td>
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<td>ENGL 1A*</td>
<td>College Composition</td>
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<tr>
<td>MATH 102*</td>
<td>Intermediate Algebra (5) OR</td>
<td>3-5</td>
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<tr>
<td>MATH 13*</td>
<td>College Algebra (3) OR</td>
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</tr>
<tr>
<td>MATH 14*</td>
<td>Introduction to Statistics (4)</td>
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</tr>
<tr>
<td>AREA 3</td>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>AREA 5/6</td>
<td>Multicultural/Living Skills</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.

### Agriculture – Environmental Horticulture

**Associate in Science:**

Also see Agriculture-Horticulture for Other Degree/Certificates

**PROGRAM DESCRIPTION:** The Environmental Horticulture Degree is designed to prepare students to complete lower division coursework at Shasta College for transfer to a B.S. degree in Agriculture with an option in crops horticulture and land resource management at CSU Chico. This degree would also prepare students to transfer to other CSUs but students should consult with Ag faculty or counselor regarding specific transfer requirements. Students interested in more details about this degree should contact the Horticulture Dept at 242-2210.

While completing degree requirements, students will also receive training about this degree should contact the Horticulture Dept at 242-2210.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and **filining an application for graduation with Admissions and Records**, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. Demonstrate safe and efficient use of both nursery and landscape tools, equipment and supplies.
2. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property, draft a landscape and a residential irrigation design, develop management schedules, and implement practices based on client needs.
3. Design and implement a nursery operation, select and make production schedules for greenhouse crops, and propagate, grow and market nursery crops.
4. Identify 150 landscape trees, shrubs and ground covers and select species suitable for different landscape situations.
5. Describe and implement both conventional and sustainable methods for use in the landscape relating to cultural practices, weed control, soil amendments, plant selection and care.
6. Obtain all course work necessary for transfer to a 4-year degree program in horticulture or related field.
7. Explain and apply basic principles of botany to horticulture practices.
8. Safely conduct landscape construction activities in the correct construction sequence. Including the proper installation of: a landscape sprinkler system, a low-volume (drip) irrigation system, concrete and brick pavers and landscape plants and sod.
9. Explain and apply the concepts of job estimating and laws as they pertain to landscape construction and maintenance.

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 102*</td>
<td>Intermediate Algebra (5) OR</td>
<td>3-5</td>
</tr>
<tr>
<td>MATH 13*</td>
<td>College Algebra (3) OR</td>
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<td>MATH 14*</td>
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<td>AREA 3</td>
<td>Humanities</td>
<td>3</td>
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<td>Multicultural/Living Skills</td>
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</tr>
<tr>
<td>MATH 13*</td>
<td>College Algebra (3) OR</td>
<td></td>
</tr>
<tr>
<td>MATH 14*</td>
<td>Introduction to Statistics (4)</td>
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**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Area</th>
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<tr>
<td>General Electives</td>
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</tr>
</tbody>
</table>

**Total Units:** 60
DEGREE REQUIREMENTS:

CORE COURSES:

AG 6  Career Placement – Ag and Natural Resources  1
AGEH 22  Nursery Practices and Plant Propagation  2
AGEH 23  Nursery Practices and Management  2
AGEH 27, 28 & 29  Plant Identification and Taxonomy  3

AGEH 33*  Environmental Horticulture OR  3
AGPS 20*  Plant Science  3

AGER 35  Landscape Design  3
AGAB 54*  Agriculture Economics  3
AGEH 38  Landscape and Turf Management  3
AGMA 44  Introduction to Construction Skills for Ag/Nat Res.  3
AGPS 25  Soils  3
CHEM 2A*  Introduction to Chemistry  5
CMST 54* or A1*  Small Group Communication  3
ENGL 1A*  College Composition  4
HIST 17A* or 17B*  U.S. History and Government  3
MATH 14*  Introduction to Statistics  4
POLS 2*  Introduction to American Government  3
SPAN 1* or C2*  Elementary Spanish  3-5

RECOMMENDED COURSES (Not Required):

AGAS 19  Principles of Animal Science (3)
AGEH 31  Landscape Irrigation (3)
AGNR 52  Computers in Ag and Natural Resources (3)
CHEM 2B  Introduction to Organic and Biochemistry (5)

Students planning to transfer to a four-year college or university should consult a counselor or Ag faculty regarding transfer requirements. TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM AS DEGREE REQUIREMENTS.

*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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<tbody>
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<td>General Electives</td>
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<tr>
<td>Degree Total</td>
<td>63-65*</td>
</tr>
</tbody>
</table>

**CSU Chico does not require Area C for high unit program.

*ANote: 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

Associate in Science:

PROGRAM DESCRIPTION: 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 others. 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.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:
1. Describe the processes involved and outline major events in the evolution and domestication of the horse.
2. Describe career opportunities and requirements for successful employment in the equine industry.
3. Relate basic genetic principles to techniques in breeding selection and mating programs.
4. Develop a ranch plan for an equine facility, incorporating legal requirements and regulations.
5. Demonstrate basic handling of the horse including catching, haltering, leading and tying.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_ag_gainful_employment.

Certificate:

PROGRAM DESCRIPTION: Completion of the Equine Certificate Program will prepare students for entry level positions in stable management, horse transportation and handling, equine care, feed and health care sales.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:
1. Describe the processes involved and outline major events in the evolution and domestication of the horse.
2. Describe career opportunities and requirements for successful employment in the equine industry.
3. Relate basic genetic principles to techniques in breeding selection and mating programs.
4. Develop a ranch plan for an equine facility, incorporating legal requirements and regulations.
5. Demonstrate basic handling of the horse including catching, haltering, leading and tying.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_ag_gainful_employment.

Continued on next page...
Agriculture –
Equipment Operations & Maintenance

Certificate:

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

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student will:
1. Understand and demonstrate safe heavy equipment operational and maintenance practices.
2. Be able to use heavy equipment to move soil to grade.
3. Be able to perform basic equipment inspections and maintenance procedures.
4. Demonstrate the knowledge and skills to survey, layout and set grade on a construction project.
5. Be able to operate and maintain heavy equipment resulting in minimum impact to the watershed and use appropriate Best Management Practices to control erosion.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_heop_gainful_employment

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>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 94</td>
<td>Worksite Learning</td>
<td>3</td>
</tr>
<tr>
<td>AGAS 11</td>
<td>Livestock Feeding and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>AGEQ 12</td>
<td>Horsemanship</td>
<td>3</td>
</tr>
<tr>
<td>AGEQ 13</td>
<td>Horse Husbandry</td>
<td>3</td>
</tr>
<tr>
<td>AGEQ 14</td>
<td>Western Riding and Training</td>
<td>3</td>
</tr>
<tr>
<td>AGEQ 21</td>
<td>Horse Management</td>
<td>3</td>
</tr>
<tr>
<td>AGEQ 111</td>
<td>Handling Problem Horses</td>
<td>3</td>
</tr>
<tr>
<td>AGEQ 113</td>
<td>Horse Ownership and Basic Handling</td>
<td>3</td>
</tr>
<tr>
<td>AGMA 44</td>
<td>Intro. to Const. Skills for Ag and Natural Resources</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE: 30

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

Agriculture –
Forest Science and Technology

Associate in Science:

PROGRAM DESCRIPTION: 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.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student will:
1. Have the appropriate coursework and field experience to pursue seasonal Forestry Technician jobs or to transfer to a University in a Forestry-related field.
2. Be able to properly identify all common species of trees and shrubs native to the Western US by their scientific and common names and to discuss general uses, site characteristics, and geographic distributions of these species.
3. Be able to apply knowledge of the Silvicultural treatments used to regulate stand, Composition, regenerate stands, increase growth rates, and improve timber quality.
4. Be able to apply skills in the safe use and maintenance of tools and equipment.
5. Be able to apply computer skills using Forestry-related software.
6. Be able to select and implement an appropriate protocol following the scientific method to collect, statistically analyze, evaluate, and document original research data.
7. Be able to accurately navigate in the field using maps, compass, a Global Positioning System (GPS). Students will also be able to use GPS for field data collection and Geographic Information Systems (GIS) for data mapping and display.
8. Be able to evaluate basic theory, concepts, and ecological principles as they apply to Forestry, Wildlife, Water Resources, and Ecosystem Restoration and will use his/her cumulative skills to think critically and to work out possible solutions to address problems facing Natural Resources managers today and in the future.
9. Be able to apply fundamentals of Wildland fire ecology, behavior, and suppression techniques.

DEGREE REQUIREMENTS:

CORE COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGNR 1*</td>
<td>Introduction to Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>AGNR 6</td>
<td>Native Plant Identification</td>
<td>3</td>
</tr>
<tr>
<td>AGNR 50</td>
<td>Natural Resources Measurements</td>
<td>4</td>
</tr>
<tr>
<td>AGNR 52</td>
<td>Computers in Agriculture/Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>AGNR 53</td>
<td>Forest Protection and Health</td>
<td>3.5</td>
</tr>
<tr>
<td>AGNR 65</td>
<td>Forest Ecology</td>
<td>3</td>
</tr>
<tr>
<td>AGNR 94</td>
<td>Natural Resources Worksite Learning</td>
<td>3</td>
</tr>
<tr>
<td>AGPS 24</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>BOT 1</td>
<td>General Botany</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2A</td>
<td>Introduction to Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>FERS 118</td>
<td>Introduction to Wildland Fire Fighting</td>
<td>1.5</td>
</tr>
<tr>
<td>GEOG 9</td>
<td>Map and Geospatial Principles</td>
<td>3</td>
</tr>
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</table>

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

Continued on next page...
### Associate in Science Degree Requirements:

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

**Note:** Calculation assumes a student will double-count the Multicultural 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 and Landscaping

*Also see Agriculture-Environmental Horticulture for Transfer Degree Information*

### Associate in Science

**PROGRAM DESCRIPTION:** 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. This degree will prepare students for jobs in both landscape and nursery areas. Job opportunities continue to outnumber the number of graduates in our local area. Career choices include 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. Students planning to transfer to a college or university should consult a counselor or Horticulture Faculty Advisor regarding transfer requirements.

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

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of the certificate, the student will:

1. Demonstrate safe and efficient use of both nursery and landscape tools, equipment and supplies.
2. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property, draft a landscape and a residential irrigation design, develop management schedules, and implement practices based on client needs.
3. Design and implement a nursery operation, select and make production schedules for greenhouse crops, and propagate, grow and market nursery crops.
4. Identify 150 landscape trees, shrubs and ground covers and select species suitable for different landscape situations.
5. Demonstrate skills to assess site or plant cultural issues and make recommendations for enhancing the health of the landscape planting or nursery plants using integrated pest management.
6. Describe and implement both conventional and sustainable methods for use in the landscape relating to cultural practices, weed control, soil amendments, plant selection and care.
7. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.
8. Explain and apply basic principles of botany to horticulture practices.
9. Safely conduct landscape construction activities in the correct construction sequence: Including the proper installation of: a landscape sprinkler system, a low-volume (drip) irrigation system, concrete and brick pavers and landscape plants and sod.
10. Explain and apply the concepts of job estimating and laws as they pertain to landscape construction and maintenance.
11. Demonstrate landscape maintenance activities and equipment operation in a safe manner. Including the ability to test and evaluate soil fertility, select and apply fertilizers at the proper rate. Recognize common turf grass species and select proper maintenance techniques for each type of turf grass and to prune landscape trees and shrubs.
12. Demonstrate a strong work and personal ethic.
13. Demonstrate skills needed to take the Landscape Industries Certified Technician Exam.

**DEGREE REQUIREMENTS:**

Some of these classes require math skills. Students are encouraged to begin taking math classes early in the program.

**CORE COURSES:**

- **AG 6** Career Placement – Ag and Natural Resources 1
- **AGEH 22** Nursery Practices and Plant Propagation 2
- **AGEH 23** Nursery Practices and Management 2
- **AGEH 26** Integrated Pest Management in Environ. Hort. 3
- **AGEH 27** Plant Identification and Taxonomy 1
- **AGEH 28** Plant Identification and Taxonomy 1
- **AGEH 29** Plant Identification and Taxonomy 1
- **AGEH 31.1** Landscape Irrigation - Design 1
- **AGEH 31.2** Landscape Irrigation - Installation 1
- **AGEH 31.3** Landscape Irrigation – Troubleshoot and Schedule 1
- **AGEH 33** Environmental Horticulture 3
- **AGEH 35** Landscape Design 3
- **AGEH 38** Landscape and Turf Management 3
- **AGEH 94** Horticulture Worksite Learning 3
- **AGMA 44** Introduction to Const. Skills for Ag and Nat. Res. 2
- **AGNR 52** Computers in Agriculture/Natural Resources 3
- **AGNR 66A** Watershed Restoration Practicum I 1
- **AGNR 66B** Watershed Restoration Practicum II 1
- **AGNR 83** Introduction to Global Positioning Systems (GPS) 1
- **AGPS 24** Soils 3
- **CHEM 2A** Introduction to Chemistry 5
- **AGEH 29 Plant Identification and Taxonomy 1**
- **AGEH 28 Plant Identification and Taxonomy 1**
- **AGEH 27 Plant Identification and Taxonomy 1**
- **AGEH 31.3 Landscape Irrigation – Troubleshoot and Schedule 1**
- **AGEH 33 Environmental Horticulture 3**
- **AGEH 35 Landscape Design 3**
- **AGEH 38 Landscape and Turf Management 3**
- **AGEH 94 Horticulture Worksite Learning 3**
- **AGMA 44 Introduction to Const. Skills for Ag and Nat. Res. 2**
- **AGNR 52 Computers in Agriculture/Natural Resources 3**
- **AGNR 66A Watershed Restoration Practicum I 1**
- **AGNR 66B Watershed Restoration Practicum II 1**
- **AGNR 83 Introduction to Global Positioning Systems (GPS) 1**
- **AGPS 24 Soils 3**
- **CHEM 2A Introduction to Chemistry 5**

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

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Major</th>
<th>43</th>
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</thead>
<tbody>
<tr>
<td>Additional General Education</td>
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</tr>
<tr>
<td>General Electives</td>
<td>0</td>
</tr>
<tr>
<td><strong>Degree Total</strong></td>
<td><strong>61</strong></td>
</tr>
</tbody>
</table>

*Note:** Calculation assumes a student will double-count the Multicultural 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.

**Certificate:**

**PROGRAM DESCRIPTION:** 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. This certificate will prepare students for jobs in both landscape and nursery areas. Career choices include 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.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

*Ag – Horticulture Certificate listed on next page*
Ag – Horticulture Certificate (continued):

PROGRAM LEARNING OUTCOMES:
Upon successful completion of the certificate, the student should be able to:

1. Demonstrate safe and efficient use of both nursery and landscape tools, equipment and supplies
2. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property, draft a landscape and a residential irrigation design, develop management schedules, and implement practices based on client needs.
3. Design and implement a nursery operation, select and make production schedules for greenhouse crops, and propagate, grow and market nursery crops.
4. Identify 150 landscape trees, shrubs and ground covers and select species suitable for different landscape situations.
5. Demonstrate skills to assess site or plant cultural issues and make recommendations for enhancing the health of the landscape planting or nursery plants using integrated pest management.
6. Describe and implement both conventional and sustainable methods for use in the landscape relating to cultural practices, weed control, soil amendments, plant selection and care.
7. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.
8. Explain and apply basic principles of botany to horticulture practices.
9. Safely conduct landscape construction activities in the correct construction sequence: Including the proper installation of: a landscape sprinkler system, a low-volume (drip) irrigation system, concrete and brick pavers and landscape plants and sod.
10. Explain and apply the concepts of job estimating and laws as they pertain to landscape construction and maintenance.
11. Demonstrate landscape maintenance activities and equipment operation in a safe manner. Including the ability to test and evaluate soil fertility, select and apply fertilizers at the proper rate. Recognize common turf grass species and select proper maintenance techniques for each type of turf grass and to prune landscape trees and shrubs.
12. Demonstrate a strong work and personal ethic.
13. Demonstrate skills needed to take the Landscape Industries Certified Technician Exam

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_hort_gainful_employment

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEH 31</td>
<td>Landscape Irrigation</td>
<td>3</td>
</tr>
<tr>
<td>AGEH 35</td>
<td>Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>AGPS 24</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>AGPS 25</td>
<td>California Water</td>
<td>3</td>
</tr>
</tbody>
</table>

RESTRICTED ELECTIVES: (Complete one of the following) 1-4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE 96</td>
<td>Horticulture Worksite Learning</td>
<td>3</td>
</tr>
<tr>
<td>AGPS 20</td>
<td>Plant Science (4)</td>
<td></td>
</tr>
<tr>
<td>AGMA 44</td>
<td>Intro. to Const. Skills for Ag. and Nat. Res. (3)</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL CREDIT HOURS: 13 – 16

In addition to the core courses, students will need to complete additional hours of work experience in order to take the Contractor or Designer Exams. Students will have access to practical applications and computer training on these topics as well as worksite learning opportunities. Basic soil and plant science, electrical principles and pumping technologies will be covered.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

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

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.
Ag – Horticulture – Landscape and Turf Management Certificate (continued):

PROGRAM LEARNING OUTCOMES:
Upon successful completion of the certificate, the student should be able to:
1. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property, draft a landscape and a residential irrigation design, develop management schedules, and implement practices based on client needs.
2. Demonstrate safe and efficient use of landscape tools, equipment and supplies.
3. Demonstrate landscape maintenance activities and equipment operation in a safe manner. Including the ability to test and evaluate soil fertility, select and apply fertilizers at the proper rate. Recognize common turf grass species and select proper maintenance techniques for each type of turf grass and to prune landscape trees and shrubs.
4. Explain and apply the concepts of job estimating and laws as they pertain to landscape maintenance and utilize this information to calculate job costs.
5. Demonstrate a strong work and personal ethic.
6. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_hort_gainful_employment/.

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEH 23</td>
<td>Nursery Practices &amp; Management</td>
<td>2</td>
</tr>
<tr>
<td>AGEH 26</td>
<td>Integrated Pest Management in Environ. Hort.</td>
<td>3</td>
</tr>
<tr>
<td>AGEH 27</td>
<td>Plant Identification and Taxonomy</td>
<td>1</td>
</tr>
<tr>
<td>AGEH 28</td>
<td>Plant Identification and Taxonomy</td>
<td>1</td>
</tr>
<tr>
<td>AGEH 29</td>
<td>Plant Identification and Taxonomy</td>
<td>1</td>
</tr>
<tr>
<td>AGEH 35</td>
<td>Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>AGEH 38</td>
<td>Landscape and Turf Management</td>
<td>3</td>
</tr>
<tr>
<td>AGEH 94</td>
<td>Horticulture Worksite Learning</td>
<td>1-3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE: 15 – 17

Agriculture – Horticulture – Retail Nursery Sales

Certificate:

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

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of the certificate, the student should be able to:
1. Demonstrate the ability to use a taxonomic key or field guide to correctly identify unknown species of plants, birds, mammals, and aquatic invertebrates to the level of genus.
2. Be able to select and use an appropriate protocol following the scientific method to collect, statistically analyze, evaluate, and document original research data.
3. Be able to accurately navigate in the field using maps, compass, a Global Positioning System (GPS). Students will also be able to use GPS for field data collection and Geographic Information Systems (GIS) for data mapping and display.
4. Be able to evaluate basic theory, concepts, and ecological principles as they apply to Forestry, Wildlife, Water Resources, and Ecosystem Restoration and use his/her cumulative skills to think critically and to work out possible solutions to address problems facing Natural Resources managers today and in the future.

DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGNR 1*</td>
<td>Introduction to Natural Resources</td>
</tr>
<tr>
<td>AGNR 6</td>
<td>Native Plant Identification</td>
</tr>
<tr>
<td>AGNR 12</td>
<td>Environmental Policy and Law</td>
</tr>
<tr>
<td>AGNR 50</td>
<td>Natural Resource Measurements</td>
</tr>
<tr>
<td>AGNR 52</td>
<td>Computers in Agriculture/Natural Resources</td>
</tr>
<tr>
<td>AGNR 60*</td>
<td>Environmental Science (GE-Natural Science)</td>
</tr>
<tr>
<td>AGNR 64*</td>
<td>Watershed Management and Ecology</td>
</tr>
<tr>
<td>AGNR 65</td>
<td>Forest Ecology</td>
</tr>
<tr>
<td>AGNR 66A</td>
<td>Watershed Restoration Practicum I</td>
</tr>
<tr>
<td>AGNR 70</td>
<td>Wildlife Management and Conservation</td>
</tr>
<tr>
<td>AGNR 94</td>
<td>Natural Resources Worksite Learning</td>
</tr>
<tr>
<td>AGMA 44</td>
<td>Intro. to Const. Skills for Ag and Natural Res.</td>
</tr>
<tr>
<td>AGPS 24*</td>
<td>Soils</td>
</tr>
<tr>
<td>GEOG 9</td>
<td>Map and Geospatial Principles</td>
</tr>
</tbody>
</table>

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

Continued on next page...
Chapter 5 – Degrees and Certificates

Ag – Natural Resources Degree (continued):

<table>
<thead>
<tr>
<th>ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
</tr>
<tr>
<td>Additional General Education</td>
</tr>
<tr>
<td>General Electives</td>
</tr>
<tr>
<td>Degree Total</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.

Certificate:

PROGRAM DESCRIPTION: The Natural Resources curriculum is designed to meet the demand for trained personnel in a broad range of Natural Resource/Environmental Science fields in addition to numerous private organizations.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student will:

1. Be qualified to pursue seasonal job employment with the Federal Government, a State Agency, or a Private company in a field related to Forestry & Natural Resources.
2. Be able to use a specified protocol following the scientific method to collect, analyze, evaluate, and document original research data.
3. Be able to accurately navigate in the field using maps, compass, a Global Positioning System (GPS). Students will also be able to use GPS for field data collection and Geographic Information Systems (GIS) for data mapping and display.
4. Be able to evaluate basic theory, concepts, and ecological principles as they apply to Forestry, Wildlife, Water Resources, and Ecosystem Restoration and will use his/her cumulative skills to think critically and to work out possible solutions to address problems facing Natural Resources managers today and in the future.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_nr_gainful_employment/.

CERTIFICATE REQUIREMENTS:

AGNR 1 Introduction to Natural Resources 3
AGNR 6 Native Plant Identification 3
AGNR 50** Natural Resources Measurements 4
AGNR 66A* Watershed Restoration Practicum I 1
AGNR 70 Wildlife Conservation and Management 3
GEOG 9 Map and Geospatial Principles 3

TOTAL UNITS FOR CERTIFICATE: 17

**These courses also count towards the Watershed Restoration Certificate.

Agriculture – Pest Control Advisor Preparation

Certificate:

PENDING CHANCELLOR’S OFFICE APPROVAL

PROGRAM DESCRIPTION: Pest Control Advisors (PCAs) are licensed professional production consultants who serve California agriculture, natural resource and horticulture producers. PCAs specialize in pest management, but they are also an important resource to producers in a wide range of production concerns related to plant health. This certificate satisfies the core-course requirements specified for option “3. b” in preparing to take the Pest Control Advisor’s exam with the California Department of Pesticide Regulation. The following courses need to be completed with a 2.0 grade point average or better. Note: In addition to completing the course work, the Department of Pesticide Regulation requires PCA exam applicants to have completed 24 months of technical work experience before taking the exam.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of the certificate, the student should be able to:

1. Demonstrate the ability to communicate with clients, assess pest damage for ecological and economic sustainability, determine thresholds and implement IPM practices based on client/crop needs.
2. Explain and apply basic principles of soils, cation exchange capacity, entomology and botany to horticulture practices and pesticide mode of action.
3. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.
4. Demonstrate application of pesticides in a safe manner, including selecting proper PPE, mixing, calibration and application.

REQUIREMENTS FOR CERTIFICATE:

To prepare for the PCA exam, students will need to complete 42 units of the required curricula specified in the core-curricula areas below with a 2.0 grade point or better in each course.

CATEGORY 1: PHYSICAL AND BIOLOGICAL SCIENCES:

Choose 12 units from the following courses:

AGNR 60 Environmental Science (3)
AGNR 65 Forest Ecology (3)
AGPS 20 Plant Science (4)
BIOL 1# Principles of Biology (4)
BIOL 10 General Biology Lecture (3)
BIOL 10L General Biology Lab (1)
BIOL 12 Field Biology (3)
BOT 1# General Botany (4)
CHEM 2B# Intro to Organic Chemistry and Biochemistry (5)
CHEM 6 Intro to Chemistry Applied to the Environment (4)
CHEM 26 Fundamentals of Gen, Organic, and Biochem (4)
CHEM 70 or 71# Organic Chemistry (4)
MICR 1# Microbiology (5)
ZOOL 1# General Zoology

CATEGORY 2: CROP HEALTH:

AGEH 31# Landscape Irrigation 3
AGNR 70 Wildlife Conservation and Management 3
AGPS 24 Soils 3

CATEGORY 3: PEST MANAGEMENT AND METHODS:

AGEH 26 Integrated Pest Management 3
AGEH 61 Plant Protection Materials 3

CATEGORY 4: PRODUCTION SYSTEMS:

Choose 6 units from the following courses:

AGAS 11 Livestock Feeding and Nutrition (3)
AGAS 19 Principles of Animal Science (3)
AGAS 30 Livestock Production (3)
AGEH 22 Nursery Practices and Plant Propagation (2)
AGEH 27, 28 & 29 Plant Identification (1 each for a total of 3)
AGEH 33 Environmental Horticulture (3)
AGEH 38 Landscape and Turf Management (3)
AGEH 60 Master Gardener Training (3)
AGEH 71/72 Organic Gardening (1 each)
AGN 4 Introduction to Range Sciences (3)
AGNR 53 Forest Protection and Restoration (3)
AGNR 55 Introduction to Forest Operations (3)
AGVIT 81 Vineyard Care (1)

RESTRICTED ELECTIVES: 9

Complete additional 9 units from Categories 2-4 above

#Indicates at least one prerequisite is required.

TOTAL UNITS FOR CERTIFICATE: 42
Agriculture – Sustainable Agriculture Science

Associate in Science:

PROGRAM DESCRIPTION: The Sustainable Agriculture Science Degree at Shasta College provides training for ranching, farming, agriculture production and related careers in vocational education, sales, services and distribution of agriculture-related products. In the core courses, students will receive a broad-based knowledge of agriculture, agri-business 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.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Describe the development and dissemination of modern agricultural technologies and land use practices.
2. Explain the principles of crop rotation and demonstrate the ability to develop a simple crop rotation plan.
3. To frame problems and ask critical questions concerning agricultural sustainability.
4. Address complex agricultural problems by using systems thinking and other approaches.
5. Describe the principles and practices used to enhance and maintain biological diversity in an agricultural environment.
6. Evaluate the role of soil fertility in an ecological production system.

DEGREE REQUIREMENTS:

CORE COURSES:
- AG 51 Agriculture Accounting (3)
- AG 54* Agriculture Economics (3)
- AG 42 Farm Power and Machinery (3)
- CHEM 2A* Introduction to Chemistry (required) (5)
- AGPS 20* Plant Science (4)
- AGPS 24A* Soils (3)
- AGSA 56 Intro. to Sustainable Ag and Farm Management (3)

TOTAL UNITS FOR CORE 27

OPTION 1 – General Agr. Science Concentration (Choose eight units)
- AG 51 Agriculture Accounting (3)
- AG 54* Agriculture Economics (3)
- AG 42 Farm Power and Machinery (3)
- CHEM 2A* Introduction to Chemistry (required) (5)
- AGPS 20* Plant Science (4)
- AGPS 24A* Soils (3)
- AGSA 56 Intro. to Sustainable Ag and Farm Management (3)

OPTION 2 – Agriculture Education Concentration (Choose nine units)
- AG 1 Career Planning for Agriculture (2)
- AG 6 Career Placement – Ag and Natural Resources (1)
- AG 9A Agriculture and Natural Resources Leadership I (1)
- AG 94 Worksite Learning OR 1
- AG 58 Student Enterprise Projects

TOTAL UNITS FOR CORE 27

OPTION 3 – Farm, Ranch, and Wildland Management Concentration (Choose a total of nine units with at least one course from each area)

(Additional courses may be added, the number of units is increased by 6 units.)

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

Computer Literacy test OR 0-3
- AGMN 52 Computers in Ag and Natural Resources (3)

AREA 1: Social and Behavioral Science for some Options 0-3
- AREA 2: Humanities 3
- AREA 5: Multicultural/Living Skills 3

1. Students planning to transfer to a college or university should consult a counselor or Agriculture faculty regarding transfer requirements. TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM A.S. DEGREE REQUIREMENTS.
2. 69 units and all graduation requirements are required for the AS Degree.

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS
- Major 45-51
- Additional General Education 6-9
- General Electives 0-9
- 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.

Applied Geographic Information Systems

Associate in Science:

PROGRAM DESCRIPTION: The Associate of Science degree in Applied Geographic Information Systems (AGIS) provides students with skills, knowledge and experience in the application of GIS. Students complete courses in the technical aspects of GIS and information technologies, along with courses in fields to which GIS is commonly applied, including earth and social sciences, natural resources and engineering. Students gain knowledge of maps, geographic data, and imagery, while developing skills in data collection, analysis and map creation. As students progress through the program the applied field courses provide direction for learning about the application of GIS, which gives direction to GIS project work. Worksite learning allows students to gain GIS workplace experience in their chosen field and to develop contacts among the community of GIS professionals. Successful students will have strong computer and critical thinking skills.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Explain and summarize key GIS concepts, applications and societal implications.
2. Perform GIS data acquisition, capture, editing, and attributing.

Continued on next page…
Chapter 5 – Degrees and Certificates 2013-2014 Shasta College Catalog

Applied Geographic Information Systems Degree (continued):

3. Manage GIS data through file management, database design, georeferencing and conversion.
4. Perform GIS analysis using queries, overlay functions, and models.
5. Produces a portfolio of maps demonstrating effective communication, design aesthetics, application of GIS tools and use of cartographic standards.
6. Performs customization of GIS applications through programming and web services.
7. Effectively engages with community through projects, volunteer activities, user meetings and worksite learning.
8. Articulates key opportunities and challenges related to the application of GIS for a chosen application discipline.
9. Demonstrates effective written and oral communication as it pertains to a chosen application discipline.

DEGREE REQUIREMENTS:

CORE:
- GEOG 5* Digital Planet: GIS and Society 3
- GEOG 9 Map and Geospatial Principles 3
- GEOG 10 Introduction to Geographic Information Systems 3
- GEOG 12 GIS Data Design and Capture 3
- GEOG 13 GIS Spatial Analysis 3
- GEOG 14 GIS Cartography and Visualization 3
- GEOG 15 Intro to Remote Sensing 3
- GEOG 25 GIS Projects 1
- GEOG 94 GIS Worksite Learning 2

INFORMATION TECHNOLOGIES:
Choose 6 units from the following courses: 6
- CIS 2* Introduction to Computer Science (3)
- CIS 20 Access for Windows I (1)
- CIS 21 Access for Windows II (1)
- CIS 23 Database Management Systems (3)
- CIS 52 Install and Configure Server 2012 (1)
- CIS 53 Administering Server 2012 (1)
- CIS 54 Configure Advanced Server 2012 Services (1)
- CIS 61* C++ Programming (3)
- CIS 62* Java Programming (3)
- CIS 64 Web Programming using Java/ PHP/Flash (3)
- GEOG 21 GIS-CAD Integration (1)
- GEOG 24 Customizing GIS (1)

APPLICATION DISCIPLINES:
Choose 6 to 8 units from the following courses: 6-8
- AGNR 1* Intro to Natural Resources (3)
- AGNR 50 Natural Resources Measurements (3)
- ENGR 1A Measurements and Plane Surveying (3)
- ENGR 27 Map and Computer-aided Drafting (3)
- ESCI 5* Introduction to Geology (4)
- ESCI 10* Environmental Geology (4)
- GEOG 1A\1AL Physical Geography (3/1)
- GEOG 1B* Cultural Geography (3)

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

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

Major 36-38
Additional General Education 18
General Electives 4-6
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.

Certificate:

PROGRAM DESCRIPTION: The Geographic Information Systems (GIS) Certificate at Shasta College provides students with the knowledge and skills needed to apply principles, methods and tools of geographic information systems (GIS). Students develop foundation principles of maps, geographically referenced data, imagery and global positioning systems. GIS fundamentals are taught, both in conceptual and practical terms. Students learn the design of geographic databases and the capture of data using global positioning systems (GPS) and remotely sensed imagery. Spatial analysis skills are developed, from basic geographic inquiry through more complex analysis using GIS overlays and models. Students learn the principles and practice of remote sensing and image processing for integration with GIS and GPS. Maps are designed and implemented for output in hardcopy and digital formats. Worksite learning allows students to gain GIS workplace experience and to develop contacts among the community of GIS professionals. Successful students will have strong computer and critical thinking skills. Refer to http://www.shastacollege.edu/gis/ for more information.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Explain and summarize key GIS concepts, applications and societal implications.
2. Perform GIS data acquisition, capture, editing, and attributing.
3. Manage GIS data through file management, database design, georeferencing and conversion.
4. Perform GIS analysis using queries, overlay functions, and models.
5. Produce a portfolio of maps demonstrating effective communication, design aesthetics, application of GIS tools and use of cartographic standards.
6. Employ best practices for GIS project design, planning, and implementation.
7. Effectively engage with community through projects, volunteer activities, user meetings and worksite learning.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/gis_gainful_employment.

CERTIFICATE REQUIREMENTS:
- GEOG 5 Digital Planet: GIS and Society 3
- GEOG 9 Map and Geospatial Principles 3
- GEOG 10 Introduction to GIS 3
- GEOG 12 GIS Data Design and Capture 3
- GEOG 13 GIS Spatial Analysis 3
- GEOG 14 GIS Cartography and Visualization 3
- GEOG 15 Introduction to Remote Sensing 3
- GEOG 94 GIS Worksite Learning 2

TOTAL UNITS FOR CERTIFICATE 24

Art

Associate in Arts:

This Art degree is proposed to be replaced by an Associate of Arts Degree for Transfer in 2013-14. Students are advised to consult with a counselor before choosing the existing Art degree.

PROGRAM DESCRIPTION: This curriculum qualifies the student for the AA degree in Art. Students interested in transferring should check course requirements with counselors or the transfer college.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

Continued on next page...
**Art Degree (continued):**

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. Describe and successfully apply the elements and principles of art and design to two-dimensional compositions or three-dimensional forms.
2. Select appropriate tools and techniques in dealing with a variety of media then demonstrate informed, skilled and sensitive handling in the execution of two-dimensional imagery and three-dimensional forms.
3. Investigate, develop and employ conceptual themes which clearly and consistently reflect the student’s point of view.
4. Effectively identify and utilize resources for art historical research.
5. Articulate his/her (objective and subjective) understanding of two and three dimensional works in writing.
6. Orally evaluate the works of fellow students and implement suggestions made through the evaluation of his/her work by others.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2*</td>
<td>History of Western Art Through the Gothic Period</td>
<td>3</td>
</tr>
<tr>
<td>ART 3*</td>
<td>Western Art, Renaissance to Contemporary</td>
<td>3</td>
</tr>
<tr>
<td>ART 12</td>
<td>Beginning Form, Design and Color</td>
<td>3</td>
</tr>
<tr>
<td>ART 13</td>
<td>Intermediate Form, Design and Color</td>
<td>3</td>
</tr>
<tr>
<td>ART 21A</td>
<td>Beginning Freehand Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 21B</td>
<td>Intermediate Freehand Drawing</td>
<td>3</td>
</tr>
</tbody>
</table>

*May be used to fulfill General Education requirements.

**RESTRICTED ELECTIVES:** (Choose nine units) 9

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART 15</td>
<td>Three Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 17</td>
<td>Shades, Shadows and Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>ART 26A</td>
<td>Beginning Watercolor</td>
<td>3</td>
</tr>
<tr>
<td>ART 26B</td>
<td>Intermediate Watercolor</td>
<td>3</td>
</tr>
<tr>
<td>ART 26C</td>
<td>Advanced Intermediate Watercolor</td>
<td>3</td>
</tr>
<tr>
<td>ART 26D</td>
<td>Advanced Watercolor</td>
<td>3</td>
</tr>
<tr>
<td>ART 29A</td>
<td>Beginning Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 29B</td>
<td>Intermediate Painting</td>
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</tr>
<tr>
<td>ART 29C</td>
<td>Advanced Intermediate Painting</td>
<td>3</td>
</tr>
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<td>ART 29D</td>
<td>Advanced Painting</td>
<td>3</td>
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<tr>
<td>ART 31A</td>
<td>Beginning Figure Drawing</td>
<td>3</td>
</tr>
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<td>ART 31B</td>
<td>Intermediate Figure Drawing</td>
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<tr>
<td>ART 31C</td>
<td>Advanced Intermediate Figure Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 31D</td>
<td>Advanced Figure Drawing</td>
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</tr>
<tr>
<td>ART 35A</td>
<td>Beginning Ceramics</td>
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<td>ART 35B</td>
<td>Intermediate Ceramics</td>
<td>3</td>
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<tr>
<td>ART 45</td>
<td>Beginning Glass</td>
<td>3</td>
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<tr>
<td>ART 46</td>
<td>Glass Blowing</td>
<td>3</td>
</tr>
<tr>
<td>ART 50A</td>
<td>Beginning Printmaking</td>
<td>3</td>
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<td>ART 50B</td>
<td>Intermediate Printmaking</td>
<td>3</td>
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<td>ART 50C</td>
<td>Advanced Printmaking</td>
<td>3</td>
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<tr>
<td>ART 55A</td>
<td>Beginning Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 55B</td>
<td>Intermediate Sculpture</td>
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<td>ART 55C</td>
<td>Advanced Sculpture</td>
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<tr>
<td>ART 57</td>
<td>Sculptural Glass</td>
<td>3</td>
</tr>
<tr>
<td>ART 60A</td>
<td>Beginning Darkroom Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 60B</td>
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<td>ART 60C</td>
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<tr>
<td>ART 70A</td>
<td>Beginning Digital Photography</td>
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<td>ART 70B</td>
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<td>ART 70D</td>
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**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

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<th>Category</th>
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<td>Degree Total</td>
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**Certification:**

**PROGRAM DESCRIPTION:** The objective is to allow the student to gain entry level skills specific to the automotive industry.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this certificate, the student should be able to:

1. Inspect, diagnose, disassemble, repair, replace and service components/systems in student’s area of specialization.
2. Work safely and responsibly within all shop safety and environmental guidelines and standards.
3. Demonstrate competency in accessing and applying technical service information.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>AUTO 1</td>
<td>Vehicle Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 10</td>
<td>Automotive Electronics</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 20</td>
<td>Engine Performance</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 21</td>
<td>Advanced Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 94</td>
<td>Automotive Worksite Learning</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 130</td>
<td>Automotive Steering &amp; Suspension</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 131</td>
<td>Automotive Wheel Alignment</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 147</td>
<td>Automotive Braking Systems</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 150</td>
<td>Introduction to Engine Maching</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 152</td>
<td>Engine Machining Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 161</td>
<td>Manual Drive Trains &amp; Axles</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 162</td>
<td>Automatic Transmissions and Transaxles</td>
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</tr>
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<td>AUTO 163</td>
<td>Automotive Heating &amp; Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1A*</td>
<td>College Composition</td>
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<td>INDE 1</td>
<td>Career Planning for Industrial Technology</td>
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<td>MATH 110*</td>
<td>Essential Math</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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<th>Category</th>
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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.

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.
Chapter 5 – Degrees and Certificates

Automotive Technology Certificate (continued):

**GAINFUL EMPLOYMENT INFORMATION:** For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_auto_gainful_employment/.

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
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<td>AUTO 94</td>
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<tr>
<td>AUTO 150</td>
<td>Introduction to Engine Machining</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 152</td>
<td>Engine Machining Laboratory</td>
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</tr>
<tr>
<td>AUTO 161</td>
<td>Manual Drive Trains &amp; Axes</td>
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</tr>
<tr>
<td>AUTO 162</td>
<td>Automotive Transmissions and Transaxles</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 163</td>
<td>Automotive Heating &amp; Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>INDE 1</td>
<td>Career Planning for Industrial Technology</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 40

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**Automotive Technology – Automotive Chassis Certificate:**

**PROGRAM DESCRIPTION:** Introduction to automotive chassis systems: Principles of automotive brake and suspension systems, wheel balance, tire service, suspension and headlamp alignment; maintenance, troubleshooting procedures, and proper use of alignment and balancing machines, brake lathes and other diagnostic equipment; diagnosis, disassembly, inspection, and rebuilding of suspension and brake systems; emphasis on proper use of manuals and safe use of tools and equipment; preparation for CA State Brake and Lamp licensing exams.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

**PROGRAM LEARNING OUTCOMES:**

1. Perform undercar inspections and repair suspension, hydraulic, and active braking systems.
2. Diagnose vehicle alignment concerns.
3. Identify the basic electrical circuits and diagnose automotive electrical systems.
4. Apply the basic principles of physics as they work in the automotive industry.

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 1</td>
<td>Vehicle Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 130</td>
<td>Automotive Steering &amp; Suspension</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 147</td>
<td>Automotive Braking Systems</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 147</td>
<td>Automotive Braking Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 11

---

**Automotive Technology – Automotive Electrical-Electronics Certificate:**

**PROGRAM DESCRIPTION:** A study of basic electrical theory and the function, diagnosis, and repair of modern automotive electrical systems. Emphasis is placed on the use of instrumentation in the diagnosis of electrical circuits and component failures.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

**PROGRAM LEARNING OUTCOMES:**

1. Identify the basic electrical circuits and diagnose automotive electrical systems.
2. Apply the basic principles of physics as they work in the automotive industry.
3. Interpret and analyze automotive fuel, and ignition systems.
4. Utilize appropriate diagnostic equipment, documentation, and troubleshooting principles on various automotive systems.

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 1</td>
<td>Vehicle Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 10</td>
<td>Automotive Electronics</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 6

---

**Automotive Technology – Automotive Engine Performance Certificate:**

**PROGRAM DESCRIPTION:** This certificate prepares a student to be successful as an entry-level technician in vehicle electrical systems repairs.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student's transcript.

**PROGRAM LEARNING OUTCOMES:**

1. Identify the basic electrical circuits and diagnose automotive electrical systems.
2. Apply the basic principles of physics as they work in the automotive industry.
3. Interpret and analyze automotive fuel, and ignition systems.
4. Utilize appropriate diagnostic equipment, documentation, and troubleshooting principles on various automotive systems.

**CERTIFICATE REQUIREMENTS:**

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

**TOTAL UNITS FOR CERTIFICATE** 13

---

**Automotive Technology – Automotive Engine Repair Certificate:**

**PROGRAM DESCRIPTION:** A study of the principles of automotive engines, fuel and ignition systems, tool and equipment safety, maintenance procedures, use of diagnostic equipment, minor head and block machining, diagnosis, disassembly, inspection, and rebuilding of engines, fuel systems and ignition systems. Also includes introduction to electric and hybrid vehicle principles and maintenance.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**

1. Demonstrate an understanding of four-stroke engine theory, basic safe machining practices, and engine assembly.

**REQUIREMENTS FOR CERTIFICATE:**

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

**TOTAL UNITS FOR CERTIFICATE** 6
### Automotive Technology – Automotive Heating – Air Conditioning
#### Certificate:

**PROGRAM DESCRIPTION:** Study of automotive air conditioning systems: Principles and systems necessary for the installation, design, function, and repair of air conditioning units; maintenance, troubleshooting procedures, proper use of air conditioning charging station and recovery/recycle equipment; emphasis on proper use of manuals and safe use of tools and equipment.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:
1. Identify the basic electrical circuits and diagnose automotive electrical systems.
2. Demonstrate the use of skills relevant for problem-solving, decision-making, and resolving ethical dilemmas in the business environment including critical thinking, effective written and oral communication, working effectively in teams and the proficient use of computers for information search, retrieval, problem solving and communication.
3. Identify and explain the current economic indicators regarding inflation, unemployment, monetary and fiscal policy and their effects on consumers and small businesses.
4. Utilize appropriate diagnostic equipment, documentation, and troubleshooting principles on automotive HVAC systems.

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 1</td>
<td>Vehicle Electrical Systems</td>
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<td>AUTO 10</td>
<td>Automotive Electronics</td>
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<tr>
<td>AUTO 163</td>
<td>Automotive Heating &amp; Air Conditioning</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 9

### Business
#### Associate in Science:

**PROGRAM DESCRIPTION:** This degree prepares you to enter the workforce and have the skills you need to move up the career ladder. Your beginning career opportunities include entry-level marketing, management, entrepreneur, customer service representative and retail sales. The courses offered in this degree teach the skills necessary to be successful in business. Many courses are offered during the day and evening at one of our extended education campuses, and online.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this degree, the student should be able to:
1. Explain the criteria for the formation and enforcement of business and consumer contracts, including the specialty areas of sales and agency.
2. Demonstrate the use of skills relevant for problem-solving, decision-making, and resolving ethical dilemmas in the business environment including critical thinking, effective written and oral communication, working effectively in teams and the proficient use of computers for information search, retrieval, problem solving and communication.
3. Identify and explain the current economic indicators regarding inflation, unemployment, monetary and fiscal policy and their effects on consumers and small businesses.
4. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
5. Utilize their ability to identify and apply business and finance concepts to advance into upper division course work as business majors in the fields of accounting, finance, marketing, management and information technology and services.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tr>
<td>BUAD 6</td>
<td>Business Law I OR</td>
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<tr>
<td>BUAD 7</td>
<td>Principles of Retailing</td>
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</tr>
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<td>BUAD 10*</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 40*</td>
<td>Entrepreneurship and Small Business OR</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 176</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 41</td>
<td>Supervision and Leadership</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>
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<td>BUAD 71*</td>
<td>Introduction to e-Commerce</td>
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<tr>
<td>BUAD 76</td>
<td>Sales OR</td>
<td>3</td>
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<tr>
<td>BUAD 77</td>
<td>Principles of Marketing</td>
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</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
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<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
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<td>ECON 1B*</td>
<td>Principles of Economics (MACRO)</td>
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<td>OAS 10</td>
<td>Excel for Windows – I</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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*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.
Chapter 5 – Degrees and Certificates

Business Administration – Accounting Concentration

**ASSOCIATE IN SCIENCE**

**PROGRAM DESCRIPTION:** This degree prepares you to enter the workforce in an entry level accounting, bookkeeping, or clerk position with many private sector and government organizations. This degree also provides an excellent knowledge base for those planning to pursue an advanced degree in accounting, business, economics, or law (ACCT 2 and ACCT 4 are recommended for these students).

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this degree, the student should be able to:
1. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
2. Identify and illustrate fundamental accounting concepts, classifications, cost systems, cost-volume-profit relationships, budgeting and profit planning to support planning, control and decision making activities of management.
3. Use integrated accounting software in performing the processes of the accounting cycle and preparing the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
4. Prepare and process payroll records and payroll tax returns in compliance with applicable federal and state laws and regulations.
5. Apply the Internal Revenue Code and related Treasury Regulations as they relate to individual, partnership and corporation income taxes; prepare simple individual income tax returns.
6. Explain the criteria for the formation and enforcement of business and consumer contracts, including the specialty areas of sales and agency.
7. Demonstrate the use of skills relevant for problem solving, decision making and solving ethical dilemmas in the business environment including critical thinking, effective written and oral communication, working effectively in teams and the proficient use of computers for information search, retrieval, problem solving and communication.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2</td>
<td>Introduction to Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Basic Accounting-II OR</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 4</td>
<td>Introduction to Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 103</td>
<td>PC Accounting</td>
<td>2</td>
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<tr>
<td>ACCT 104</td>
<td>Payroll Accounting</td>
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</tr>
<tr>
<td>ACCT 194</td>
<td>Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 6</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 10*</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 15</td>
<td>Business and Society</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>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>CIS 20</td>
<td>Access for Windows OR</td>
<td>1</td>
</tr>
<tr>
<td>CIS 23</td>
<td>Fundamentals of SQL</td>
<td>3</td>
</tr>
<tr>
<td>OAS 51</td>
<td>Introduction to Keyboarding and Word</td>
<td>3</td>
</tr>
<tr>
<td>OAS 64</td>
<td>Computerized Ten-Key</td>
<td>0.5</td>
</tr>
</tbody>
</table>

**OAS 40 Computerized Accounting Principles**

**OAS 50 Financial Accounting Principles**

**OAS 60 General Accounting Principles**

**OAS 70 Advanced Accounting Principles**

**OAS 80 Specialized Accounting Principles**

**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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<td>General Electives</td>
<td>8.5</td>
</tr>
<tr>
<td>Degree Total</td>
<td>60</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 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.

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Business Administration – Business Entrepreneurship

**CERTIFICATE:**

**PROGRAM DESCRIPTION:** Students completing this certificate will have the foundation necessary to begin building a small business.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:
1. Present an outline of a well-structured business plan, beginning with the Title Page and ending with an Appendix. There are a total of 11 topics discussed in class.

**CERTIFICATE REQUIREMENTS:**

<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 10</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 40</td>
<td>Entrepreneurship and Small Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 42</td>
<td>Financing a Small Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 71</td>
<td>Introduction to e-Commerce</td>
<td>1</td>
</tr>
<tr>
<td>BUAD 120</td>
<td>Starting a Small Business</td>
<td>1</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:**

17

---

Business Retailing

**Certificate:**

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

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:
1. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
2. Recognize, acknowledge and apply the functions and responsibilities of retail management.
3. Develop and apply a business retailing strategy leading to a business plan.

**GAINFUL EMPLOYMENT INFORMATION:** For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_buad_gainful_employment/.

**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>BUAD 10</td>
<td>Introduction to Business</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 Worksite Learning</td>
<td>1</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 176</td>
<td>Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
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</table>

**TOTAL UNITS FOR CERTIFICATE:**

29
**Computer and Information Systems-Systems Management**

**Associate in Science:**

**PROGRAM DESCRIPTION:** 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.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. Demonstrate competence in the area of Microsoft Networking. To demonstrate competence in this area the student will be able to build networks with the following features: three computers on a LAN using a switch; a router with passwords, interfaces, routing protocol configured; a switch with two VLANs and STP protocol; PPP encapsulation and PAP/CHAP authentication protocols between two routers connected with a serial link.

2. Convert an IP Address and subnet mask from a dotted decimal notation into a binary format. Using the values in a binary format the student will then be able to demonstrate the function of the subnet mask in isolating the network address.

**GAINFUL EMPLOYMENT INFORMATION:** For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait.cis.gainful.employment/.

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 32</td>
<td>CCNA2–Working at a Small to Med. Business/ISP</td>
<td>3</td>
</tr>
<tr>
<td>CIS 33</td>
<td>CCNA3–Routing and Switching in the Enterprise</td>
<td>3</td>
</tr>
<tr>
<td>CIS 34</td>
<td>CCNA4–Designing/Supporting Computer Networks</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 16

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**Computer and Information Systems – Network Administration**

**Associate in Science:**

**PROGRAM DESCRIPTION:** 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.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. Demonstrate competence in the area of Cisco Networking. To demonstrate competence in this area the student will be able to build networks with the following features: three computers on a LAN using a switch; a router with passwords, interfaces, routing protocol configured; a switch with two VLANs and STP protocol; PPP encapsulation and PAP/CHAP authentication protocols between two routers connected with a serial link.

2. Demonstrate competence in the area of A+ computer maintenance. To demonstrate competence in this area the student will be able to accurately identify and explain the function of the CPU, harddrive, RAM, CDROM drive, and video card of a PC.

3. Demonstrate competence in the area of Microsoft Networking. To demonstrate competence in the area the student will be able to: Install Windows Seven Professional; to Manage Users, Computers and Groups in Windows 2008 Server; to Implement, Manage and Maintain Name Resolution; to Plan and Implement Server Roles and Server Security; to Plan and Implement an Active Directory Infrastructure; to Create the Logical Design for an Active Directory Infrastructure; to Create the Logical Design for Network Infrastructure Security.

**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 5 units.

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
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<tr>
<td>Additional General Education</td>
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</tr>
<tr>
<td>General Electives</td>
<td>4</td>
</tr>
<tr>
<td>Total Degree Units</td>
<td>60*</td>
</tr>
</tbody>
</table>

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.
4. Demonstrate competence in the area of basic electronics. To demonstrate competence in these areas the student will effectively work with other students in a team setting and effectively present a team network design project to a design review committee consisting of other students.

5. Demonstrate competence in the area of web page design and development. To demonstrate competence in these areas the student will develop and publish a 3-page web site to a server. The site must include the following elements: (1) appropriate overall design elements; (2) working hyperlinks among pages, to an outside site(s), and to an e-mail address; (3) a table; and (4) a form.

6. Demonstrate competence in the area of basic electronics. To demonstrate competence in this area the student will accurately test electronic components such as LED, 7Segment display, pushbutton, speaker and photo sensor, and correctly build circuits with the electronic components and program a microcontroller to manipulate the built circuits.

DEGREE REQUIREMENTS:

CORE COURSES:
- BUAD 41* Leadership and Supervision 3
- BUAD 45 * Human Relations on the Job 3
- CIS 2 * Introduction to Computer Science 4
- CIS 33 Cisco CCNA 3
- CIS 35 Cisco CCNA 3
- CIS 36 Cisco CCNA 3
- CIS 50 Windows 8 – Configuration 1
- CIS 51 Managing and Maintaining Windows 8 1
- CIS 52 Install and Configure Server 2012 1
- CIS 53 Administering Server 2012 1
- CIS 54 Configure Advanced Server 2012 Server 1
- CIS 55 Exchange Server 2010, Configuring 1
- CIS 72 Fundamentals of Linux 3
- CIS 90 A+ Certification Preparation/Cisco IT Essentials I 4
- CIS 92 Computer Security 3
- INDE 138 Fundamentals of Electronics 3

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

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

Major 44
Additional General Education 18
General Electives 0

Degree Total 62

*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.

Certificate:

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

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for graduation with Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES: Upon successful completion of this certificate, the student should be able to:

1. Demonstrate competence in the area of Cisco Networking. To demonstrate competence in this area the student will be able to build networks with the following features: three computers on a LAN using a switch; a router with passwords, interfaces, routing protocol configured; a switch with two VLANs and STP protocol; PPP encapsulation and PAP/CHAP authentication protocols between two routers connected with a serial link.

2. Demonstrate competence in the area of A+ computer maintenance. To demonstrate competence in this area the student will be able to: accurately identify and explain the function of the CPU, harddrive, RAM, CDROM drive, and video card of a PC.

3. Demonstrate competence in the area of Microsoft Networking. To demonstrate competence in this area the student will be able to: Install Windows Seven Professional; to Manage Users, Computers and Groups in Windows 2008 Server; to Implement, Manage and Maintain Name Resolution; to Plan and Implement Server Roles and Server Security; to Plan and Implement an Active Directory Infrastructure; to Create the Logical Design for an Active Directory Infrastructure; to Create the Logical Design for Network Infrastructure Security.

4. Demonstrate competence in the area of web page design and development. To demonstrate competence in these areas the student will develop and publish a 3-page web site to a server. The site must include the following elements: (1) appropriate overall design elements; (2) working hyperlinks among pages, to an outside site(s), and to an e-mail address; (3) a table; and (4) a form.

5. Demonstrate competence in the area of basic electronics. To demonstrate competence in this area the student will accurately test electronic components such as LED, 7Segment display, pushbutton, speaker and photo sensor, and correctly build circuits with the electronic components and program a microcontroller to manipulate the built circuits.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_cis_gainful_employment.

CERTIFICATE REQUIREMENTS:

- BUAD 45 Human Relations 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 8 – Configuration 1
- CIS 51 Managing and Maintaining Windows 8 1
- CIS 52 Install and Configure Server 2012 1
- CIS 53 Administering Server 2012 1
- CIS 54 Configure Advanced Server 2012 Server 1
- CIS 55 Exchange Server 2010, Configuring 1
- CIS 72 Fundamentals of Linux 3
- CIS 90 A+ Certification Preparation/Cisco IT Essentials I 4
- CIS 92 Computer Security 3
- INDE 138 Fundamentals of Electronics 3

TOTAL UNITS FOR CERTIFICATE 35

Computer and Information Systems – Web Design

Certificate:

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

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES: Upon successful completion of this certificate, the student should be able to:

1. Use a computer and the internet for daily needs.
2. Build dynamic web pages for personal and business use.
3. Incorporate graphics and photos into web pages.
4. Understand e-commerce basics and how to design a marketable website.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_cis_gainful_employment.
CIS – Web Design Certificate (continued):

CERTIFICATE REQUIREMENTS:

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<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ART 80A</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 71</td>
<td>Introduction to E-Commerce</td>
<td>1</td>
</tr>
<tr>
<td>CIS 2</td>
<td>Introduction to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>CIS 64</td>
<td>Web Programming Using Java/PHP/Flash</td>
<td>3</td>
</tr>
<tr>
<td>CIS 73</td>
<td>Photoshop</td>
<td>1</td>
</tr>
<tr>
<td>CIS 83</td>
<td>Web Design Using Dream Weaver</td>
<td>2</td>
</tr>
<tr>
<td>CIS 86</td>
<td>HTML</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 17

Computer and Information Systems – Windows Server

Certificate:

PROGRAM DESCRIPTION: This certificate will prepare students for certification in Microsoft operating system installation and configuration. The program includes courses in basic electronics, DOS installation and operation, PC repair and computer management.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:

1. Install and configure a Microsoft operating system.
2. Identify and troubleshoot common problems with computer parts and components.
4. Design and implement a network infrastructure.
5. Represent the current trends in computer and information systems technology.

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BUAD 45</td>
<td>Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>CIS 2</td>
<td>Introduction to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>CIS 50</td>
<td>Windows 8 Configuring</td>
<td>1</td>
</tr>
<tr>
<td>CIS 51</td>
<td>Managing and Maintaining Windows 8</td>
<td>1</td>
</tr>
<tr>
<td>CIS 52</td>
<td>Install and Configure Server 2012</td>
<td>1</td>
</tr>
<tr>
<td>CIS 53</td>
<td>Administering Server 2012</td>
<td>1</td>
</tr>
<tr>
<td>CIS 54</td>
<td>Configure Advanced Server 2012 Server</td>
<td>1</td>
</tr>
<tr>
<td>CIS 55</td>
<td>Exchange Server 2010, Configuring</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 13

Certificate Maintenance

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

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:

1. Identify and troubleshoot common problems with computer parts and components.
2. Solve the associated problems.
3. Describe the different types of memory, how each operate and installation procedure.
4. Install a Microsoft operating system and configure the computer as a typical workstation.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_cis_gainful_employment/

Construction Technology

Associate in Science:

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

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:

1. Explain and demonstrate the use of appropriate personal protective equipment.
2. Identify other construction hazards on your job site, including hazardous material exposures, environmental elements, welding and cutting hazards, confined spaces, and fires.
3. Perform construction math with and without a calculator including adding, subtracting, multiplying and dividing whole numbers, fractions, percentages as well as decimals in the field.
4. Identify power tools commonly used in the construction trades.
5. Recognize relate and identify basic construction drawing terms, components, symbols and different classifications of construction drawings.
6. Calculate the quantities of lumber and wood products using industry-standard methods.

DEGREE REQUIREMENTS:

CORE COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 52</td>
<td>Residential Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CONS 53</td>
<td>Materials of Construction</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 160</td>
<td>Carpentry Practices</td>
<td>5</td>
</tr>
<tr>
<td>CONS 161</td>
<td>Electrical, Plumbing and Mechanical Systems</td>
<td>5</td>
</tr>
<tr>
<td>CONS 178</td>
<td>Building Codes and Standards</td>
<td>3</td>
</tr>
<tr>
<td>ENER 50</td>
<td>Renewable Energy and Sustainable Development</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 119</td>
<td>Blueprint and Specification Reading (Architectural)</td>
<td>2</td>
</tr>
<tr>
<td>INDE 1</td>
<td>Career Planning for Industrial Technology</td>
<td>1</td>
</tr>
<tr>
<td>WELD 70</td>
<td>Beginning Welding</td>
<td>2</td>
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ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>33</td>
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<tr>
<td>Additional General Education</td>
<td>21</td>
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<tr>
<td>General Electives</td>
<td>6</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.

Certificate:

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

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

Continued on next page…
Chapter 5 – Degrees and Certificates

Construction Technology Certificate (continued):

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Explain and demonstrate the use of appropriate personal protective equipment.
2. Identify other construction hazards on your job site, including hazardous material exposures, environmental elements, welding and cutting hazards, confined spaces, and fires.
3. Perform construction math with and without a calculator including adding, subtraction, multiply and divide whole numbers, fractions, percentages as well as decimals in the field.
4. Identify power tools commonly used in the construction trades.
5. Recognize relate and identify basic construction drawing terms, components, symbols and different classifications of construction drawings.
6. Calculate the quantities of lumber and wood products using industry-standard methods.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_cons_gainful_employment/.

CERTIFICATE REQUIREMENTS:

| CONS 52  | Residential Estimating | 3 |
| CONS 54  | Survey of the Building Industry | 3 |
| CONS 56  | Essentials of Construction | 3 |
| CONS 160 | Carpentry Practicice | 5 |
| CONS 161 | Electrical, Plumbing and Mechanical Systems | 5 |
| CONS 178 | Building Codes and Standards | 3 |
| ENGR 119 | Blueprint and Specification Reading (Architectural) | 2 |
| MATH 100 | Technical Applications of Mathematics | 3 |

TOTAL UNITS FOR CERTIFICATE 27

Customer Service Academy Certificate:

PROGRAM DESCRIPTION: 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 challenging issues you face either personally or professionally. Each course topic requires 9 hours of study and awards .5 units of elective academic credit.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office, therefore, completion of the certificate will not be listed on the student's transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. List ways in which to communicate more effectively to both internal and external customers.
2. Recognize conflict styles and manage conflict situations utilizing conflict resolution skills.
3. List ways to maintain/change your attitude in order to provide superior customer service.
4. Embrace change within organizations and apply skills to cope with change.
5. Self-assess individual attitude, stress, communication style, personality style and apply skills to work with team members who possess different styles.

REQUIREMENTS FOR CERTIFICATE:

| BUAD 81  | Stress Management in the Workplace | .5 |
| BUAD 82  | Managing Organizational Change | .5 |
| BUAD 83  | Conflict Resolution | .5 |
| BUAD 84  | Attitude in the Workplace | .5 |
| BUAD 85  | Customer Service in the Workplace | .5 |
| BUAD 86  | Decision Making and Problem Solving | .5 |
| BUAD 87  | Team Building | .5 |
| BUAD 88  | Communicating with People | .5 |
| BUAD 89  | Time Management | .5 |
| BUAD 90  | Values and Ethics | .5 |

TOTAL UNITS FOR CERTIFICATE 5

Dental Hygiene

Associate in Science:

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

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

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
1. 95% of those students who are eligible to sit for the National Board Dental Hygiene Examination (NBDHE) will pass their examination on the first attempt.
2. Upon completion and passing the NBDHE, 90% of those students who are eligible to sit for the State Board Exam will pass their examination on the first attempt.

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

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

GRADUATION REQUIREMENTS:
Students must graduate from the Dental Hygiene Program to be eligible to take the state licensing examination. Due to the time commitments of the program, it is strongly recommended that students complete the following additional requirements for graduation before beginning dental hygiene courses:
• Completion of the Humanities requirement.
• Completion of competence in mathematics. MATH 102 Intermediate Algebra or MATH 110 Essential Math are the advised courses for meeting this requirement.
• Completion of the multi-cultural awareness requirement.
• Completion of computer literacy.

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

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

PREREQUISITE COURSES:

| ANAT 1* | Anatomy | 5 |
| PHY 1* | Physiology (with Lab) | 5 |
| MICR 1* | Microbiology | 5 |
| ENGL 1A* | College Composition | 4 |
| CHEM 2A* | Introduction to Chemistry | 5 |
| CHEM 2B* | Introduction to Organic and Biochemistry | 5 |
| SOC 1* | Introduction to Sociology | 3 |
| PSYC 1A* | General Psychology | 3 |
| CMST 60* | Public Speaking OR | 3 |
| CMST 10* | Interpersonal Communication | 3 |
| FSS 25* | Nutrition | 3 |

TOTAL UNITS FOR CERTIFICATE 41

Continued on next page…
Final selection of qualified applicants is competitive. Please contact the Health Sciences Division for information regarding the selection criteria used to evaluate qualified applicants.

DEGREE REQUIREMENTS:

CORE COURSES:
DNTL 10 Oral Biology 3
DNTL 11 Oral Radiology 3
DNTL 12 Head and Neck Anatomy 2
DNTL 13 Dental Health Education/Seminar 2
DNTL 14 Introduction to Clinic 4
DNTL 20 Local Anesthesia and Nitrous Oxide 2
DNTL 21 General and Oral Pathology 4
DNTL 23 Patient Management and Geriatrics 2
DNTL 24 Clinical Practice I 4
DNTL 25 Clinic I Seminar 2
DNTL 26 Nutrition in Dentistry 1
DNTL 30 Periodontology I 3
DNTL 31 Pharmacology 2
DNTL 32 Dental Materials 2
DNTL 33 Advanced Clinical Topics 2
DNTL 34 Clinical Practice II 4
DNTL 35 Clinic II Seminar 15
DNTL 40 Periodontology II 1
DNTL 41 Practice and Financial Management 1
DNTL 42 Clinic III Seminar 2
DNTL 43 Clinical Practice III 4
DNTL 44 Community Oral Health 3
DNTL 45 Ethics and Jurisprudence 2

TOTAL MAJOR UNITS: 56

*May be used to fulfill General Education requirements.

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

Major 97
Additional General Education 6
General Electives 0
Degree Total 103*

*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.

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

Major 45.5
Additional General Education 15
General Electives 0
Degree Total 60.5*

*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.

Diesel Technology

Associate in Science:

PROGRAM DESCRIPTION: 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.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filling an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. With emphasis on general education, verify if the path of repair was correct by testing and/or completing a work order/report.

DEGREE REQUIREMENTS:

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

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

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

Major 45.5
Additional General Education 15
General Electives 0
Degree Total 60.5*

*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.

Certificate:

PROGRAM DESCRIPTION: 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. This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Explain the basic theory of the subject matter or system for the course of instruction based on industry standards.
2. Analyze a scenario based upon an equipment system failure/problem/complaint.
3. Employ a systematic approach to troubleshooting a system malfunction and prepare a solution.
4. Demonstrate the correct tools/supplies required to diagnose/repair a malfunction.
5. Verify if the path of repair was correct by testing and/or completing a work order/report.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_dies_gainful_employment/.

CERTIFICATE REQUIREMENTS:

DIES 48 Hydraulics 3.5
DIES 49 Advanced Hydraulics 3
DIES 94 Worksle Learning For Diesel Technology 1
DIES 160 Diesel Engine Electronic Control 4
DIES 161 Diesel Technology Field Training 2
DIES 162 Heavy Duty Power Train 4
DIES 164 Diesel Performance Analysis 4
DIES 166 Diesel Engines 6
DIES 170 Heavy Duty Braking Systems 4
ENGL 190 Reading & Writing II ** (see below for alternatives) 4
INDE 1 Career Planning for Industrial Tech. 1
WELD 100 Technical Applications of Mathematics 3
WELD Any Advanced Welding Class 3
WELD 70 Beginning Welding 3

TOTAL UNITS FOR CERTIFICATE 45.5 – 48.5
### Dietary Service Supervisor Certificate:

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

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and **filing an application for graduation with Admissions and Records**, the student's transcript will reflect completion of this certificate.

**PROGRAM LEARNING OUTCOMES:**

1. Identify the location of applicable laws and regulations and determine compliance to regulatory requirements (state and federal). Determine acceptable standards of care in dietary services. Includes but not limited to California Code of Regulations, Title 22; Federal Code of Regulations; Business and Professions Code of Dietitians and Dietetic Technicians, Registered; and Food and Drug Administration Food Code.

2. Identify the role and limitations (no scope of practice) of the Dietary Service Supervisor under law (Title 22) for the Operation of Food Service.

3. Participate with the Registered Dietitian in the timely review and revision of the facility's policies and procedures to ensure that they are in compliance with regulations and standards of practice. Identify location of Diet Manuals.

4. Assist in the orientation of new employees. Assist in the ongoing, planned staff development of seasoned employees to ensure that they are competent to carry out the functions of the dietary service and trained in approved policies.

5. Assist in the development of Quality Assurance Programs to monitor staff practices for compliance, to determine training needs, and to evaluate resident/patient satisfaction.

6. Assist in the development of planned menu (and disaster menus) to meet the nutritional needs of resident/patients in accordance with the recommended dietary allowances. Ensure that therapeutic menus and standardized recipes are followed, as approved by R.D.

7. Ensure that food is served by methods that conserve nutritive value, flavor and appearance. Ensure that food is prepared in a form designed to meet individual needs and substitutions are of similar nutritive value.

8. Ensure that residents/patients receive and consume foods in the appropriate form as prescribed by the physician who is lawfully authorized to prescribe. Ensure that there is accommodation of food preferences, maintenance of current profile cards are maintained, and provide assistive devices as needed.

9. Ensure that food is stored, prepared, distributed, and served under sanitary conditions to prevent food borne illness. This includes the sanitation oversight of areas assigned to other departments such as the cleaning & sanitizing of internal components of the ice machine & nurse pantry refrigerators, trash disposal systems.

10. Ensure that the department runs smoothly (including the food ordering and storage according to applicable state requirements), staffing schedules, employee health, labor relations, safety programs and other duties as assigned by administration.

**GAINFUL EMPLOYMENT INFORMATION:** For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at [www.shastacollege.edu/specs_dss_gainfulemployment](http://www.shastacollege.edu/specs_dss_gainfulemployment).

**REQUIREMENTS FOR CERTIFICATE:**

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<td>CULA 60</td>
<td>Sanitation and Safety</td>
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<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>
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<tr>
<td>DSS 94</td>
<td>DSS Certificate Worksite Learning</td>
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<tr>
<td>FSS 25</td>
<td>Nutrition</td>
<td>3</td>
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<tr>
<td>FSS 27</td>
<td>Nutrition and Disease</td>
<td>2</td>
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</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:** 16

### Early Childhood Education Associate in Science:

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

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

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

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and **filing an application for graduation with Admissions and Records**, the student's transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. Apply an understanding of principles of child development in planning inclusive and developmentally appropriate curriculum and environments.

2. Exhibit skill in observation and documentation as a vehicle for child and program assessment and curriculum design.

3. Create environments that are healthy, respectful and supportive to children and their families.

4. Utilize positive guidance of young children based on an understanding of cognitive, physical, and social and emotional development of children.

5. Identify professional standards and expectations as based upon NA EYC'S Code of Ethical Conduct.

6. Discuss current trends and issues in the field of Early Childhood Education.

7. Perform common tasks online and access resources and information in regard to current best practices in early education.

8. Identify and exhibit the ability to interact successfully with children and adults from an ever changing society.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</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 2*</td>
<td>Child, Family, Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3</td>
<td>Early Childhood Program Admin.</td>
<td>3</td>
</tr>
<tr>
<td>ECE 6</td>
<td>Teaching Practicum</td>
<td>5</td>
</tr>
<tr>
<td>ECE 15</td>
<td>Child Health, Safety and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE 16</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>
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**REMITTED ELECTIVES:** (Choose six units) 6

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<td>ECE 10</td>
<td>Early Childhood Learning</td>
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<tr>
<td>ECE 12</td>
<td>Infant-Toddler Learning</td>
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</tr>
<tr>
<td>ECE 14</td>
<td>School Age and Adolescent</td>
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</tr>
<tr>
<td>ECE 16</td>
<td>Fundamentals of EC Mentoring &amp; Supervision</td>
<td>2</td>
</tr>
<tr>
<td>ECE 22</td>
<td>EC Curriculum: Infant/Toddler Care</td>
<td>3</td>
</tr>
<tr>
<td>ECE 24</td>
<td>EC Curriculum: School Age Care</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>
</tbody>
</table>

*Continued on next page...*
PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Apply an understanding of principles of child development in planning and implementing developmentally appropriate curriculum environments.
2. Exhibit skills in observation and documentation as a vehicle for child and family assessment.
3. Create environments that are healthy, respectful, and supportive to children and their families.
4. Utilize positive guidance of young children based on an understanding of cognitive, physical, and social and emotional development of children.
5. Establish and maintain safe and healthy learning environments for young children.
6. Upon completion of the ECE Certificate, students will, through planned and sequenced field experiences, develop the knowledge, skills and professional dispositions necessary to promote the development and learning of young children.

GAINFUL EMPLOYMENT INFORMATION:
For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs/ece_ecetecert_gainfulemployment/.

CERTIFICATE REQUIREMENTS:
ECE 2 Child, Family, Community 3
ECE 7 Early Childhood Observation and Assessment 3
ECE 8 Teaching Practicum for Young Children 5
ECE 9 Child, Growth and Development 3
ECE 15 Child Health, Safety and Nutrition 3
ECE 17 Principles and Practices of Teaching Young Children 3
ECE 20 Introduction to Curriculum 3
ECE 28 Teaching in a Diverse Society 3

TOTAL UNITS FOR CERTIFICATE 26

Certificate:
PROGRAM DESCRIPTION: 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 California Community Care Licensing [Social Services Dept.] requirements related to physical site).
This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of the certificate, the student should be able to:
1. Apply principles of child development in planning inclusive and developmentally appropriate curriculum environments.
2. Utilize positive guidance of young children based on an understanding of cognitive, social and emotional development of children.
3. Create environments that are healthy, respectful and supportive to children and their families.
4. Identify and analyze the elements of professionalism and its importance in family childcare settings.
5. Complete class exercises applying management and operation knowledge by developing an operational structure of a family childcare setting.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs/ece_ecetecert_gainfulemployment/.

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.

CERTIFICATE REQUIREMENTS:
CORE COURSES:
ECE 1 Human Development OR 3
ECE 9 Child Growth and Development 3
ECE 2 Child, Family, Community 3
ECE 6 Exploring Family Childcare 1
ECE 52 Guidance in Adult-Child Relations 3

RESTRICTED ELECTIVES: (Choose two courses) 6
ECE 12 Infant/Toddler Learning (3)
ECE 14 School-Age Learning (3)
ECE 17 Principles/Practices of Teaching Young Children (3)
ECE 20 Introduction to Curriculum (3)
ECE 22 EC Curriculum: Infant/Toddler Care (3)
ECE 24 EC Curriculum: School Age Care (3)
ECE 26 The Child With Special Needs (3)
ECE 27 Teaching Children with Special Needs (3)
ECE 28 Teaching in a Diverse Society (3)

TOTAL UNITS FOR CERTIFICATE 16

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.
English as a Second Language
Certificate of Completion

Certificate:

PROGRAM DESCRIPTION: This certificate of completion is comprised of six non-credit courses that range from ESL beginning to advanced. These non-credit courses generally serve our immigrant population who seek language skills for employment and daily living. Instruction follows a communication-based approach to language learning. The last level in this sequence, ESL 336, acts as a transition course for students who want to pursue academic studies.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Meet three of the four course level student learning outcomes for the highest level course in the Program, ESL 236 or ESL 336.

REQUIRED NON-CREDIT COURSES:
- ESL 303 Beginning Literacy
- ESL 331 Beginning Low
- ESL 332 Beginning High
- ESL 333 Intermediate
- ESL 334 Intermediate High
- ESL 336 Advanced

Family Studies

Associate in Science:

PROGRAM DESCRIPTION: 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.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Identify the impact of the context (historical, cultural, societal, and/or familial) on individuals as they develop, as well as the reciprocal influences, and apply this understanding when analyzing human behavior.
2. Integrate the perspectives of continuity and change, multidirectional pathways, and resiliency when evaluating the process of personal and interpersonal development throughout the lifespan.
3. Identify crucial elements of various systems perspectives and apply these concepts in the analysis of specific situations.
4. Reflect a critical awareness of current issues and valid scientific research in the field of Family Studies/Human Services.
5. Create a comprehensive action plan that reflects both personal and interpersonal effectiveness within the physical, mental, financial and psychosocial domains.
6. Differentiate between personal values and professional guidelines/ethics established within the field of Human Services.
7. Complete at least one semester of guided, practical experience in the workplace that integrates classroom experience with professional training.

DEGREE REQUIREMENTS:
The student must complete the Core Courses listed below, required General Education, and electives to total 60 units to complete the A.S. Degree requirements. Some major courses may be double counted toward the General Education 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.

Fire Technology

Associate in Science:

PROGRAM DESCRIPTION: The Fire Technology curriculum is planned to serve both as an in-service program and as a pre-employment two-year program for community college students aspiring to enter the field of firefighting. Fire Technology majors may be required to fulfill a tour of duty at a local fire station. The suggested course sequence has been supplied to the Counseling Division by the Instructional Division. Students are urged to use this outline along with the Shasta College catalog. Particular attention should be paid to course prerequisites and to whether a class is taught Fall or Spring semester or both. Courses listed may be offered either spring or fall semesters, or at the discretion of the division.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Possess the necessary skills, knowledge and abilities to enter the fire service or to increase skills, knowledge and abilities for those already employed as a firefighter.

DEGREE REQUIREMENTS:
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 14 Introduction to Case Management 3
- FSS 16* Marriage & Family 3
- FSS 18* Adulthood and Aging 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) OR 3
- FSS 60* Life Management 3
- FSS 80* Family Studies & Services Worksite Learning 1-4
- PSYC 1A* General Psychology 3
- PSYC 41* Cultural/Social Context of Childhood 3
- SOC 1* Introduction to Sociology 3
- SOC 70* Social Welfare 3

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

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:
Major:
- 60 - 46-49
- Additional General Education 9
- General Electives 2-5
- Degree Total 60*
1. Demonstrate the basic knowledge, skills and abilities to safely perform the Emergency Medical Responder in which the students earn certification from the training with the same tools and appliances used by the fire service. During the application for their California State Firefighter 1 Certificate, the student works verifies successful work completion and the student makes organized volunteer fire department. Upon successful completion of the paid fire department, or twelve months of part time employment with an Academy, and a minimum of six months full time employment with an organized volunteer fire department. Upon successful completion of the Academy and the required work time, the Chief of the department in which the student works verifies successful work completion and the student makes application for their California State Firefighter 1 Certificate.

The Firefighter 1 Academy is an intense program including rigorous physical conditioning, English designed for firefighters as well as classroom and field training with the same tools and appliances used by the fire service. During the later portion of the academy students earn a State Fire Marshal Certificate for “Fire Control Three” as part of their Live Fire Training. The course also includes Emergency Medical Responder in which the students earn certification from the California Emergency Medical Authority.

Note: No college in California certifies individuals as Firefighter 1 or Firefighter 2. All certifications are issued by the California State Fire Marshal.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Demonstrate the basic knowledge, skills and abilities to safely perform the tasks required to become an entry level firefighter.

CERTIFICATE REQUIREMENTS:
FIRS 104 Firefighter I Academy 21

TOTAL UNITS FOR CERTIFICATE 21

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 1 or Firefighter 2. All certifications are approved by the California State Fire Marshal’s Office.

## Firefighter 2 Certificate

**PROGRAM DESCRIPTION:** The Firefighter 2 certification entails advanced knowledge, skills and abilities gained only after the completion of the Firefighter 1 Academy and the required employment interval with an organized volunteer or paid fire department in the state of California. These advanced skills, knowledge and abilities are presented during the Firefighter 2 academy at Shasta College. The successful completion of this Firefighter 2 academy allows the student to operate at a "journeyman level" as a firefighter.

Note: No college in California certifies individuals as Firefighter 1, or Firefighter 2. All certifications are issued by the California State Fire Marshal.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:
1. Demonstrate advanced knowledge, skills and abilities to safely perform the tasks required to become an advanced firefighter.

**CERTIFICATE REQUIREMENTS:**
FIRS 104 Firefighter I Academy 21
FIRS 108 Firefighter II Academy 5

TOTAL UNITS FOR CERTIFICATE 26

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 1 or Firefighter 2. All certifications are approved by the California State Fire Marshal’s Office.

## Fire Technology – Wildland Firefighter 1 Academy Certificate

**PROGRAM DESCRIPTION:** 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. This Academy provides the students with all the required knowledge, skills and abilities as required and dictated by the United States Forest Service (USFS) and the California Department of Forestry and Fire Protection (CDF or Cal-Fire) for a certificate required by those two wildland fire agencies for seasonal wildland firefighter employment. The focus of this academy is wildland fire control and safety in the wildland fire environment. Students who successfully complete this academy obtain the very basic skills, knowledge, and abilities to perform at the entry level as a wild land firefighter. More advanced wild land courses are contained in the Shasta College Course Catalog. Both the State and Federal wildland Fire Agencies provide their own more advance training once employment is obtained. Note: Successful completion of the Wildland Firefighter 1 Academy does not assure employment with the USFS or CAL-FIRE.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:
1. Demonstrate the basic knowledge, skills and abilities to safely perform the tasks required by the United States Forest Service and the California Department of Forestry and Fire Protection (CAL Fire) as an entry level wildland firefighter.

**CERTIFICATE REQUIREMENTS:**
FIRS 73 Wildland Firefighter I Academy 4

TOTAL UNITS FOR CERTIFICATE 4
Chapter 5 – Degrees and Certificates

Hospitality
Baking – Culinary Arts Emphasis

*Certificate:

PROGRAM DESCRIPTION: This certificate provides a foundation in business mathematics, 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 ics 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.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Demonstrate usage of a calculator to determine accurate recipe costing of baked goods.
2. Define the differences between spirits, wines, fortified wines, and liquors.
3. Explain and apply sanitation guidelines related to beverage handling in an restaurant environment.
4. Plan an effective dining room layout design for staffing and service.
5. Describe the sequence of service associated with exemplary dining room service.

CERTIFICATE REQUIREMENTS:
- BUAD 106 Business Math or Math Placement Level 3 or higher
- CULA 50 Safety and Sanitation
- CULA 73 Introduction to Wine

TOTAL UNITS FOR CERTIFICATE 4-7

*Correction made to online catalog on 8/15/13

Hospitality – Bartender – Culinary Arts Emphasis

*Certificate:

PROGRAM DESCRIPTION: 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.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Describe the flow of service between a dining room and kitchen in a restaurant environment.
2. Assess staffing needs based upon levels of projected business.
3. Plan an effective dining room layout design for staffing and service.
4. Describe wine sales and service techniques in a dining room.
5. Plan an effective dining room layout design for staffing and service.

CERTIFICATE REQUIREMENTS:
- BUAD 106 Business Math or Math Placement Level 3 or higher
- CULA 50 Safety and Sanitation
- CULA 65 Dining Room Service
- CULA 73 Introduction to Wine

TOTAL UNITS FOR CERTIFICATE 12 – 15

*Correction made to online catalog on 8/15/13

Hospitality – Dining Room Management – Culinary Arts Emphasis

*Certificate:

PROGRAM DESCRIPTION: 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.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Describe the flow of service between a dining room and kitchen in a restaurant environment.
2. Assess staffing needs based upon levels of projected business.
3. Illustrate safety and sanitation practices in food and beverage handling.
4. Describe wine sales and service techniques in a dining room.
5. Plan an effective dining room layout design for staffing and service.

CERTIFICATE REQUIREMENTS:
- BUAD 106 Business Math or Math Placement Level 3 or higher
- CULA 50 Safety and Sanitation
- CULA 65 Dining Room Service
- CULA 73 Introduction to Wine

TOTAL UNITS FOR CERTIFICATE 5 – 8

*Correction made to online catalog on 8/15/13
Hospitality –
Line Cook – Culinary Arts Emphasis

Certificate:

PROGRAM DESCRIPTION: 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.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Explain and apply sanitation guidelines related to food handling.
2. Demonstrate station organization, purchasing, storage, menu writing, and sanitation principles.
3. Calculate operation budget, various food and labor costs, menu pricing, inventory controls, and forecasting.
4. Demonstrate production line management and organization.
5. Identify and apply guidelines for handling of meats, dairy products, fresh produce, and bakery items.

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>CULA 46 Basic Food Production</td>
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<tr>
<td>CULA 46 Advanced Foods</td>
<td>5</td>
</tr>
<tr>
<td>CULA 50 Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>HOSP 10 Introduction to Hospitality</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 15

Hospitality –
Winemaking and Marketing

Certificate:

PROGRAM DESCRIPTION: 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.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Explain and apply sanitation guidelines related to food handling.
2. Demonstrate station organization, purchasing, storage, menu writing, and sanitation principles.
3. Prepare large scale quantity items in a time-restricted quality-minded setting.
4. Demonstrate production line management and organization.
5. Identify and apply guidelines for handling of meats, dairy products, fresh produce, and bakery items.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs/cola_winemct_gainfulemployment/

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course</th>
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<td>AGVIT 80 Vineyard Design and Construction</td>
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<td>AGVIT 61 Vineyard Care</td>
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<td>CULA 86 Wine With Food</td>
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<tr>
<td>CULA 73 Introduction to Wine</td>
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</tr>
<tr>
<td>CULA 74 Basic Winemaking</td>
<td>2</td>
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<tr>
<td>CULA 76 Intermediate Winemaking</td>
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<tr>
<td>CULA 78 Sensory Evaluation of Wine</td>
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<td>CULA 80 Wine Sales and Marketing</td>
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<td>CULA 88 Wines of the North State</td>
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</table>

TOTAL UNITS FOR CERTIFICATE 17

Hospitality Management –
Culinary Arts Concentration

Associate in Science:

PROGRAM DESCRIPTION: 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 cuisine, 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.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Prepare workstations, corresponding to the preparation and presentation of a meal, in a time-restricted quality-minded setting.
2. Prepare large scale quantity items in a time-restricted quality-minded setting.
3. Practice the principles of sanitation and safety procedures.
4. Recognize the types of gourmet foods served in hotels and restaurants and the presentation of these specialties.
5. Demonstrate the principles of the garde-manger section of the kitchen.

DEGREE REQUIREMENTS:

CORE COURSES:

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUAD 66* Business Communications</td>
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<td>CULA 45 Basic Food Production</td>
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<tr>
<td>CULA 46 Advanced Foods</td>
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<td>CULA 48 Gourmet Food Preparation</td>
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<td>CULA 49 Menu Planning and Cost Analysis</td>
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<td>CULA 50 Sanitation and Safety</td>
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<tr>
<td>CULA 55 Purchasing</td>
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<tr>
<td>CULA 60 Beverage Management</td>
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<td>CULA 65 Dining Room Service</td>
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<tr>
<td>CULA 75 Pastry</td>
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<td>CULA 94 Culinary Arts Worksite Learning</td>
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<td>CULA 159 Stocks, Soups, Sauces &amp; Basic Culinary Prep.</td>
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<td>CULA 161 The Art of Garde Manger</td>
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<td>CULA 172 Baking</td>
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<td>FSS 25* Nutrition</td>
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<td>HOSP 10 Introduction to the Hospitality Industry</td>
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<tr>
<td>HOSP 65 Hospitality Supervision</td>
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TOTAL UNITS REQUIRED 45

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS

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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.

Certificate:

PROGRAM DESCRIPTION: 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.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

Continued on next page...
Chapter 5 – Degrees and Certificates

Hospitality Management – Culinary Arts Concentration Certificate (continued):

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:

1. Prepare workstations, corresponding to the preparation and presentation of a meal, in a time-restricted quality-minded setting.
2. Prepare large scale quantity items in a time-restricted quality-minded setting.
3. Practice the principles of sanitation and safety procedures.
4. Recognize the types of gourmet foods served in hotels and restaurants and the presentation of these specialties.
5. Demonstrate the principles of the garde-manger section of the kitchen.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs_cula_culacert_gainfulemployment/.

CERTIFICATE REQUIREMENTS:

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

TOTAL UNITS FOR CERTIFICATE: 44

Hospitality Management – Hotel/Restaurant Management Concentration

Associate in Science:

PROGRAM DESCRIPTION: The course of study in hospitality management includes instruction in hotel and restaurant operations designed to prepare students for various positions in the hospitality industry. What interests many prospective students in this field of study is the extraordinary range of management jobs available. In addition to operational management, graduates will be able to pursue careers in such areas as personnel, marketing, sales, finance, training, facilities management, conference management, and purchasing. Career progression is often very rapid, with companies offering very good financial and professional development packages in recognition of the major shortage of well qualified management graduates for what is one of the world’s largest and fastest growing industries.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:

1. Relate customer expectations to the achievement of financial viability of the organization.
2. Practice appropriate communication skills in operational and human resource management.
3. Evaluate hospitality operations.
4. Apply quality control systems to customer service issues.
5. Apply the appropriate management/supervisory techniques to operational situations.

DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>CORE COURSES:</th>
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<tbody>
<tr>
<td>BUAD 66 *</td>
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<tr>
<td>BUAD 80</td>
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<td>CIS 1</td>
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<td>HOSP 65</td>
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<td>HOSP 94</td>
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*May be used to fulfill General Education requirements.

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

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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.

Certificate:

PROGRAM DESCRIPTION: This certificate is designed to prepare students for careers in the hospitality field associated with food and beverage management, lodging, and tourism. Hands-on worksite learning gives the student additional experience in the field.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:

1. Define the concept of service and train others to meet and exceed guest expectations, in any hospitality industry environment.
2. Define the main departments within a full-service hotel and their functions, and describe how each department works together to ensure the overall objective is met.
3. Describe computer applications commonly used in the hospitality industry.
4. Describe the nature of, and be able to effectively function in, this dynamic physically demanding environment.
5. Describe motivational techniques that management can employ to improve employee performance in a hospitality operation.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs_hosp_hotelmanagecert_gainfulemployment/.

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 80</td>
<td>Principles of Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 10</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 20</td>
<td>Hospitality Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 35</td>
<td>Computer Applications in the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 40</td>
<td>Human Resource Mgmt. in the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 94</td>
<td>Hospitality Worksite Learning</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE: 16
Industrial Technology Certificate

Certificate:

PROGRAM DESCRIPTION: 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.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Explain the basic theory of the subject matter or industrial system for the course of instruction based on industry standards.
2. Analyze a scenario based upon an industrial equipment system failure/problem/complaint.
3. Employ a systematic approach to troubleshooting an industrial system malfunction and prepare an effective repair solution.
4. Analyze component failures to determine the root cause of the component failure.
5. Verify if the path of repair was correct by testing and/or completing a work order/report.
6. Demonstrate the correct usage of tools/supplies required to diagnose/repair a malfunction

CERTIFICATE REQUIREMENTS:

<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>INDE 101</td>
<td>Industrial Occupation Basics</td>
<td>3</td>
</tr>
<tr>
<td>INDE 138</td>
<td>Fundamentals of Electronics and Electricity</td>
<td>3</td>
</tr>
<tr>
<td>MATH 100</td>
<td>Technical Applications of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>WELD 70</td>
<td>Beginning Welding</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE: 15.5

Life Management

Certificate:

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

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Explain the basic theory of the subject matter or industrial system for the course of instruction based on industry standards.
2. Analyze a scenario based upon an industrial equipment system failure/problem/complaint.
3. Employ a systematic approach to troubleshooting an industrial system malfunction and prepare an effective repair solution.
4. Analyze component failures to determine the root cause of the component failure.
5. Verify if the path of repair was correct by testing and/or completing a work order/report.
6. Demonstrate the correct usage of tools/supplies required to diagnose/repair a malfunction

CERTIFICATE REQUIREMENTS:

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

TOTAL UNITS FOR CERTIFICATE: 15.5

Music

Associate in Arts:

PROGRAM DESCRIPTION: 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, composition, 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.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Explain and demonstrate the principles and rules of common four-part harmonic practice.
2. Attain a first-year college student level of piano competency.
3. Perform as a soloist at a first-year college student level of competency on a principal instrument or voice.
4. Analyze given score materials to identify stylistic differences within the common practice era.

DEGREE REQUIREMENTS:
Students must complete the courses required for the Certificate. In addition, students fulfill the 34-39 unit general education pattern for CSU or IGETC.

CORE COURSES:

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

RESTRICTED ELECTIVES: (Choose four units) 4

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

RECOMMENDED ELECTIVE COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1</td>
<td>Music Fundamentals (pre-Music Major only)</td>
<td>3</td>
</tr>
<tr>
<td>MUS 10*</td>
<td>Music Appreciation (valid for G.E.)</td>
<td>3</td>
</tr>
<tr>
<td>MUS 11*</td>
<td>History of Jazz and Rock (valid for G.E.)</td>
<td>3</td>
</tr>
<tr>
<td>MUS 14*</td>
<td>World Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 22A</td>
<td>Beginning Piano (pre-Music Major only)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 29/30</td>
<td>Beginning/Intermediate Voice</td>
<td>1</td>
</tr>
<tr>
<td>MUS 61A</td>
<td>Performance Analysis (1-2)</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 15

*May be used to fulfill General Education requirements.
Continued on next page...
Music Degree (continued):

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>24</td>
</tr>
<tr>
<td>Additional General Education</td>
<td>34 – 39</td>
</tr>
<tr>
<td>General Electives</td>
<td>0-2</td>
</tr>
<tr>
<td>Degree Total</td>
<td>60-63*</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.

**Certificate:**

**PROGRAM DESCRIPTION:** The Certificate in Music is designed to provide preparation for development of career employment within a variety of music career choices. A few of these career options could be: working in the music industry, music performance, music publishing, musical theater, composition, and private music instruction. Additionally the music curriculum creates an opportunity for local amateur and professional musicians to perform within the music department’s performance ensembles (Choirs, Orchestras, Symphonic Bands, and Jazz Ensembles) and/or to advance their music skills.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this certificate, the student should be able to:

1. Explain and demonstrate the principles and rules of common four-part harmonic practice.
2. Attain a first-year college student level of piano competency.
3. Perform as a soloist at a first-year college student level of competency on a principal instrument or voice.
4. Analyze given score materials to identify stylistic differences within the common practice era.

**CERTIFICATE REQUIREMENTS:**

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

**RESTRICTED ELECTIVES:** (Choose four units)

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

**TOTAL UNITS FOR CERTIFICATE:** 24

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Nurse Aide/Home Health Aide

**Certificate:**

**PROGRAM DESCRIPTION:** 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).

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this certificate:

1. 90% of students taking the end of program comprehensive written and skills predictor examination will demonstrate competency by a written score of 75% or higher and demonstrate competency on at least three of five randomly selected skills consistent with state certification testing competencies.

**REQUIREMENTS FOR ENROLLMENT INTO THE PROGRAM:**

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

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEOC 180 Nurse Aide/Home Health Aide</td>
<td>13</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:** 13

---

Nursing – Associate Degree Nursing

**Associate in Science:**

**PROGRAM DESCRIPTION:** 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.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree:

1. 90% of those students who are eligible to sit for the National Council Licensing Examination for Registered Nursing (NCLEX-RN) will pass their examination within the first six months of the first attempt.

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

**Graduation Requirements:**

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

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

**REQUIREMENTS FOR ENROLLMENT IN THE PROGRAM:**

Students filing enrollment packets must be a high school graduate or equivalent. The "Prerequisite Science" courses listed below must be completed with a grade of C or higher in each course and a minimum science 2.5 GPA. Prerequisites must be completed upon application. No in progress courses will be accepted.

**PREREQUISITE COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 1* Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>MICR 1* &quot;Microbiology&quot;</td>
<td>5</td>
</tr>
<tr>
<td>PHY 1* Physiology (with lab)</td>
<td>5</td>
</tr>
</tbody>
</table>

Students must complete the remaining "PREREQUISITE" courses listed below with a grade of "C" or better in each course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1A* College Composition</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 2* Cultural Anthropology OR</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1* Introduction to Sociology OR</td>
<td></td>
</tr>
<tr>
<td>SOC 2* Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1A* General Psychology OR</td>
<td></td>
</tr>
<tr>
<td>PSYC 14* Understanding Human Behavior</td>
<td></td>
</tr>
</tbody>
</table>

Continued on next page...
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 and file 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 http://www.shastacollege.edu/hsup or call the Division Office at (530-339-3600).

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:
- BIOL 5 Introduction to Human Biology 3
- BIOL 6 Human Biology Lab 1
- ECE 1 Human Development 3
- FSS 25 Nutrition 3
- PSYC 1A General Psychology OR 3
- PSYC 14 Understanding Human Behavior 3

TOTAL UNITS FOR PREREQUISITES: 13

CERTIFICATE REQUIREMENTS:
Students must be enrolled in the program in order to take the courses listed below. Students, at their expense, are required to have a physical examination and immunizations prior to entering the program. Students must meet established physical criteria to participate in the clinical area, have a current Basic CPR card for the health professional, provide proof of drug testing, and completed a criminal background check. For specific information, see the program web page at www.shastacollege.edu/hsup or call the Division Office (530-339-3600).

NOTE: Students must show competence in both clinical and theory components (a grade of C or better) in order to progress through the curriculum. A failing clinical grade results in removal from the program regardless of the theory grade.

- VOCON 160 Foundations of Nursing Practice 15
- VOCON 161 Nursing of Adults 13
- VOCON 162 Nursing of Adults and Children 13

TOTAL UNITS FOR CERTIFICATE: 41

RECOMMENDED COURSES (Not required):
- ENGL 190 Reading and Writing II
- MATH 220 Basic Mathematics
- OAS 110 Beginning Medical Terminology

Office Administration – Administrative Office Assistant

Certificate:

PROGRAM DESCRIPTION: This certificate prepares students for work as an entry-level Administrative Assistant. Administrative Assistants work for supervisors, managers, and executives. Students learn the following skills:

- 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).
- Keyboarding: 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.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

Continued on next page...
Chapter 5 – Degrees and Certificates

Office Administration – Administrative Office Assistant Certificate (continued):

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Define ethical office behavior.
2. Define gracious and efficient behavior with office visitors using appropriate customer service skills.
3. Schedule appointments including the use of electronic calendaring.
4. Organize files and folders electronically.
5. Prepare notices, agendas, and minutes for meetings.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/data/oas_gainful_employment/.

CERTIFICATE REQUIREMENTS:
- BUAD 166 Business English 3
- CIS 10 Computer Literacy Workshop 3
- OAS 10 Excel for Windows 1
- OAS 51 Introduction to Keyboarding and Word Processing 3
- OAS 64 Computerized 10-Key 0.5
- OAS 152 Keyboarding for Speed and Accuracy 0.5
- OAS 157 Office Procedures OR (3)
- OAS 158 Medical Office Procedures (3)
- OAS 101 Outlook 1
- OAS 110 Beginning Medical Terminology (3)
- OAS 166 Records Management (2)

RESTRICTED ELECTIVES: (Choose six units) 6
- OAS 157 Office Procedures OR (3)
- OAS 158 Medical Office Procedures (3)
- OAS 101 Outlook 1
- OAS 110 Beginning Medical Terminology (3)
- OAS 166 Records Management (2)

TOTAL UNITS FOR CERTIFICATE 17

Office Administration – Administrative Office Professional

Associate in Science:

PROGRAM DESCRIPTION: 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. Intermediate knowledge of Microsoft Office: PowerPoint, Internet Explorer, and Access. Advanced knowledge of computer based filing methods and procedures. Type 50-55 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. Sales concepts, including markups, discounts, insurance, and depreciation, scheduling and reporting duties, coordinate and maintain records for staff. Obtaining on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Operate the alphabetic, numeric, and symbol keys by touch with proper typing technique.
2. Type for 5 minutes at a minimum net speed of 50 words a minute with five errors or less.
3. Expand and apply knowledge of Microsoft Word to complete business documents.
4. Increase abilities related to formatting business letters, memos, tables, mail merge, and reports including employment documents.
5. Answer, with at least 70 percent accuracy, questions on objective tests covering technical information

DEGREE REQUIREMENTS:

CORE COURSES:
- ACCT 101 Basic Accounting I 3
- ACCT 103 PC Accounting 2
- BUAD 45* Human 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 3
- CIS 20 Access for Windows I 1
- OAS 10 Excel for Windows 1
- OAS 11 Excel for Windows II 1
- OAS 51 Introduction to Keyboarding and Word Processing 3
- OAS 52 Intermediate Keyboarding and Word Processing 3
- OAS 53 Advanced Keyboarding and Word Processing 3
- OAS 64 Computerized 10-Key 0.5
- OAS 80 Outlook 1
- OAS 92 Word for Windows II 1
- OAS 94 PowerPoint 1
- OAS 152 Keyboarding for Speed and Accuracy 0.5
- OAS 157 Office Procedures 3
- OAS 166 Records Management 2
- OAS 171 Proofreading Skills 2

RECOMMENDED COURSES (not required):
- CIS 83 Web Design Using Dreamweaver 2
- OAS 12 Excel for Windows III 1
- OAS 93* Word for Windows III 1

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

Major 43
General Electives 2
Degree Total 45

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

Certificate:

PROGRAM DESCRIPTION: This certificate prepares you to be an intermediate-level Administrative Assistant. Administrative Assistants work for supervisors, managers, and executives. Skills learned: Document and Data Handling: How to prepare, modify, and proofread documents such as reports, letters, memos, records, lists, and schedules. Technology: Working knowledge of Microsoft Office: Word, Excel, PowerPoint, Internet Explorer, Access, and Outlook. Advanced knowledge of 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. Scheduling and reporting duties. Obtaining on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Type for 5 minutes at a minimum speed of 40 words per minute with five errors or less.
2. Proofread typed work, mark and count errors, and compute speed.
3. Establish folders (directories) and subfolders (sub-directories) for information management.
4. Increase abilities related to formatting business letters, memos, tables, mail merge, and reports including employment documents.
5. Answer, with at least 70 percent accuracy, questions on objective tests covering technical information.

Continued on next page...
**Office Administration – Health Information Management**

**Associate in Science:**

**Program Description:** 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. Obtain on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**Program Learning Objectives:**

Upon successful completion of this degree, the student should be able to:

1. Analyze a medical case study utilizing principles of medical terminology, medical coding, and account billing.
2. Select and assign the appropriate CPT (Current Procedural Terminology) or HCPCS (Healthcare Common Procedure System) code(s).
3. Differentiate among the payer requirements based on the patient’s status, the medical diagnosis(es), and the services/procedures performed.
4. Apply appropriate principles for claims processing and completion.
5. Explain the reimbursement issues and practice using appropriate terminology.

**Degree Requirements:**

**Core Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 45</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 166</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>OAS 10</td>
<td>Excel for Windows – I</td>
<td>1</td>
</tr>
<tr>
<td>OAS 51</td>
<td>Introduction to Keyboarding and Word</td>
<td>3</td>
</tr>
<tr>
<td>OAS 52</td>
<td>Intermediate Keyboarding and Word</td>
<td>3</td>
</tr>
<tr>
<td>OAS 64</td>
<td>Computerized Ten Key</td>
<td>.5</td>
</tr>
<tr>
<td>OAS 80</td>
<td>Outlook</td>
<td>1</td>
</tr>
<tr>
<td>OAS 92</td>
<td>Word for Windows II</td>
<td>1</td>
</tr>
<tr>
<td>OAS 94</td>
<td>PowerPoint</td>
<td>1</td>
</tr>
<tr>
<td>OAS 152</td>
<td>Keyboarding for Speed and Accuracy</td>
<td>.5</td>
</tr>
<tr>
<td>OAS 157</td>
<td>Office Procedures</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</td>
<td>2</td>
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</table>

**Recommended Courses (not required):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>OAS 12</td>
<td>Excel for Windows III</td>
<td>1</td>
</tr>
<tr>
<td>OAS 93</td>
<td>Word for Windows III</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Units for Certificate:** 32

**Certificate:**

**Program Description:** 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.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

**Program Learning Outcomes:**

Upon successful completion of this certificate, the student should be able to:

1. Identify the structure of the current coding methodologies/diagnosis and procedures.

**GAINFUL EMPLOYMENT INFORMATION:** For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_oas_gainfulEmployment/.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 166</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>OAS 10</td>
<td>Excel for Windows I</td>
<td>1</td>
</tr>
<tr>
<td>OAS 51</td>
<td>Introduction to Keyboarding and Word</td>
<td>3</td>
</tr>
<tr>
<td>OAS 52</td>
<td>Intermediate Keyboarding and Word</td>
<td>3</td>
</tr>
<tr>
<td>OAS 64</td>
<td>Computerized Ten-Key</td>
<td>.5</td>
</tr>
<tr>
<td>OAS 80</td>
<td>Outlook</td>
<td>1</td>
</tr>
<tr>
<td>OAS 110</td>
<td>Beginning Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>OAS 112</td>
<td>Basic ICD-9-CM and CPT-4 Coding</td>
<td>3</td>
</tr>
<tr>
<td>OAS 113</td>
<td>Advanced Medical Coding</td>
<td>3</td>
</tr>
<tr>
<td>OAS 114</td>
<td>Healthcare Billing and Reimbursement</td>
<td>3</td>
</tr>
<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>
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</table>

**Recommended Courses (not required):**

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

**Total Units for Certificate:** 34

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

**Associate in Arts:**

**PROGRAM DESCRIPTION:** 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.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this degree, the student should be able to:

1. Describe the basic elements of dramatic structure and analyze the dramatic components in a theatrical production.
2. Select appropriate monologues and prepare them as audition pieces.
3. Investigate the themes and dramaturgy of the Greek, Roman, Medieval, Renaissance, Elizabethan, Jacobean and Restoration periods of theater history and compare and contrast those periods through discussion, papers, and performance analysis.
4. Identify and apply the major components of stagecraft in the implementation of scenery, lighting, costume, make-up, special effects, and production management.
5. Investigate the social, political, and spiritual objectives of theatrical performance through discussions and papers that deal with gender, politics and religion.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1*</td>
<td>Introduction to Theatre Arts</td>
<td>3</td>
</tr>
<tr>
<td>THTR 8*</td>
<td>Theatre History I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 12</td>
<td>Acting I</td>
<td>2</td>
</tr>
<tr>
<td>THTR 23/26</td>
<td>Mainstage Production III OR</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Repertory Theatre I</td>
<td></td>
</tr>
<tr>
<td>THTR 30</td>
<td>Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THTR 41</td>
<td>Theatre Laboratory OR</td>
<td>3</td>
</tr>
<tr>
<td>THTR 74</td>
<td>Repertory Theatre – Technical</td>
<td>3</td>
</tr>
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</table>

**RESTRICTED ELECTIVES IN THEORY:** (Choose six units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 5*</td>
<td>20th Century Theatre (3)</td>
<td></td>
</tr>
<tr>
<td>THTR 9*</td>
<td>Theatre History II (3)</td>
<td></td>
</tr>
<tr>
<td>THTR 13</td>
<td>Acting II (2)</td>
<td></td>
</tr>
<tr>
<td>THTR 29</td>
<td>Directing (2)</td>
<td></td>
</tr>
<tr>
<td>THTR 31</td>
<td>Introduction to Theatrical Design (3)</td>
<td></td>
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<tr>
<td>THTR 34</td>
<td>Makeup (2)</td>
<td></td>
</tr>
<tr>
<td>THTR 81</td>
<td>Playwriting and Script Analysis (3)</td>
<td></td>
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</table>

**RESTRICTED ELECTIVES IN PRACTICUM:** (Choose four units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>THTR 16</td>
<td>Acting Lab (1)</td>
<td></td>
</tr>
<tr>
<td>THTR 38</td>
<td>Makeup Lab (1)</td>
<td></td>
</tr>
<tr>
<td>THTR 42</td>
<td>Technical Stage Production (1-4)</td>
<td></td>
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<tr>
<td>THTR 60</td>
<td>Special Projects-Production (1-2)</td>
<td></td>
</tr>
<tr>
<td>THTR 70</td>
<td>Repertory Theatre I (1-4)</td>
<td></td>
</tr>
<tr>
<td>THTR 74</td>
<td>Repertory Theatre – Technical (1-4)</td>
<td></td>
</tr>
<tr>
<td>THTR 97</td>
<td>Special Studio Topics: Theatre (1-3)</td>
<td></td>
</tr>
<tr>
<td>THTR 98</td>
<td>Special Topics: Theatre (1-3)</td>
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</table>

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

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
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<tbody>
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<td>Additional General Education</td>
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<td>General Electives</td>
<td>15</td>
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<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.

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## Transition Certificate for Students with Disabilities

**Certificate:**

**PROGRAM DESCRIPTION:** This curriculum is designed to provide an integrated educational option for students transitioning to post-secondary educational settings.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:

1. Approximately 70% of students should be able to use a word processor, find information on the Internet, and create a PowerPoint presentation.
2. Approximately 70% of students will be ready to enter regular college math classes such as MATH 220 or MATH 240.
3. Approximately 70% of students will be ready to enter non-adaptive college English classes such as ENGL 260 or 270.
4. Approximately 70% of students will have identified a career path.
5. Students will acquire the knowledge necessary to select relevant occupational opportunities and job search skills. Approximately 70% of students will demonstrate the ability to find job postings, complete job applications, write a resume and prepare for job interviews.
6. Students will know how to access relevant community and governmental resources. Approximately 70% of students will be able to identify at least four or more community organizations, or state agencies that provide support services for students with disabilities.

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADAP 210</td>
<td>Career Planning and Development</td>
<td>1</td>
</tr>
<tr>
<td>ADAP 254</td>
<td>Adapted Computer Skills (two semesters)</td>
<td>2</td>
</tr>
<tr>
<td>ADAP 255</td>
<td>Human Awareness and Life Skills</td>
<td>2</td>
</tr>
<tr>
<td>ADAP 256</td>
<td>Reading/Writing for Life Skills (2 semesters) (4)</td>
<td>4-6</td>
</tr>
<tr>
<td>ADAP 256</td>
<td>Reading &amp; Writing for Life Skills (2)</td>
<td></td>
</tr>
<tr>
<td>ENGL 260</td>
<td>Elements of Reading (4)</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:** 13 – 16

## Watershed Restoration Certificate

**Certificate:**

**PROGRAM DESCRIPTION:** 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.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

Continued on next page...
Watershed Restoration Certificate (continued):

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Apply the newest technologies and practices in erosion control in restoring an ecosystem.
2. Apply the latest techniques in bio-engineering applications.
3. Select and implement an appropriate method or procedure for monitoring a specific attribute of the environment.
4. Operate and maintain heavy equipment resulting in minimum impact to the watershed.
5. Accurately navigate in the field using maps, compass, a Global Positioning System (GPS). Students will also be able to use GPS for field data collection and Geographic Information Systems (GIS) for data mapping and display.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_nr_gainful_employment/.

CERTIFICATE REQUIREMENTS:
AGNR 50 Natural Resources Measurements 4
AGNR 64 Watershed Management and Ecology 3
AGNR 66A Watershed Restoration Practicum I 1
CONS 46 Equipment Operations and Maintenance 3
CONS 47 Project Construction for Equipment Operations 3

TOTAL UNITS FOR CERTIFICATE 14

Water/Wastewater Treatment Certificate:

PROGRAM DESCRIPTION: 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.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Apply the newest technologies and practices in erosion control in restoring an ecosystem.
2. Apply the latest techniques in bio-engineering applications.
3. Select and implement an appropriate method or procedure for monitoring a specific attribute of the environment.
4. Operate and maintain heavy equipment resulting in minimum impact to the watershed.
5. Accurately navigate in the field using maps, compass, a Global Positioning System (GPS). Students will also be able to use GPS for field data collection and Geographic Information Systems (GIS) for data mapping and display.

Welding Technology

Associate in Science:

PROGRAM DESCRIPTION: 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

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Demonstrate competencies in job safety skills and awareness of workplace hazards.
2. Follow written and oral instructions in the interpretation of simple drawings and sketches, including welding symbols and the execution of the fabrication process.
3. Set up, maintain, and adjust welding related equipment.
4. Acquire skills and knowledge to make a successful transition to an entry-level position in the work force.
5. Pass workmanship tests using common welding processes.

DEGREE REQUIREMENTS:

CORE COURSES:
DIES 48 Hydraulics 3.5
ENGR 118 Blueprint and Specification Reading (Mechanical) 2
INDE 1 Career Planning for Industrial Technology 1
MATH 110 Essential Math 3
WELD 70 Beginning Welding 3
WELD 73 Structural Steel Metal Fabrication 3
WELD 170 Introduction to ARC Welding 3
WELD 171 Intermediate ARC Welding 3
WELD 174 Structural Steel MIG Welding 3
WELD 175 TIG Welding 3
WELD 178 Pipe Welding Fundamentals 3
WELD 182 Advanced ARC Welding 1.5
WELD 183 Advanced ARC Welding Specialty Lab 1.5
WELD 184 Advanced GTAW (TIG) Welding 1.5
WELD 186 Advanced Pipe Welding 2
WELD 188 Advanced GMAW (MIG) Welding 1.5

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

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:
Major 38.5
Additional General Education 18
General Electives 3.5
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.

Certificate:

PROGRAM DESCRIPTION: 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.

Continued on next page...
Welding Technology Certificate (continued):

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:

1. Demonstrate competencies in job safety skills and awareness of workplace hazards.
2. Follow written and oral instructions in the interpretation of simple drawings and sketches, including welding symbols and the execution of the fabrication process.
3. Set up, maintain, and adjust welding related equipment.
4. Acquire skills and knowledge to make a successful transition to an entry-level position in the work force.
5. Pass workmanship tests using common welding processes.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_weld_gainful_employment/.

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 118</td>
<td>Blueprint &amp; Specification Reading</td>
<td>2</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>
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</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>1.5</td>
</tr>
<tr>
<td>WELD 184</td>
<td>Advanced GTAW (TIG) Welding</td>
<td>1.5</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>1.5</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 29.5

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>
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<tr>
<td>WELD 183</td>
<td>Advanced ARC Welding Specialty Lab</td>
<td>1.5</td>
</tr>
<tr>
<td>WELD 184</td>
<td>Advanced GTAW (TIG) Welding</td>
<td>1.5</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>1.5</td>
</tr>
</tbody>
</table>