New Associate Degrees for Transfer

- Agriculture Plant Science AS-T
- Geology AS-T
- Physics AS-T

New Associate Degrees

- Geographic Information Systems A.A.

*The degrees above can be awarded at this time, but check with Financial Aid regarding eligibility if declaring these as your major.
AGRICULTURE PLANT SCIENCE

Associate of Science for Transfer Degree (AS-T)

(STATE CODE 35307)

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

This degree is intended for students transferring to a California State University campus. It is not a requirement for transfer but may give students an admission advantage at some CSU campuses. Not all CSU campuses accept this degree as fulfillment of lower-division major requirements. Students should meet with a counselor to determine if this degree is a good option for them. Information on which CSU campuses accept this degree can be found at http://www.sb1440.org/

PROGRAM INFORMATION

The AS-T in Agriculture Plant Science is an interdisciplinary degree that includes coursework in plant and soil science, chemistry, economics, and statistics. Students will be introduced to a broad range of topics including plant propagation, conducting research, conservation practices, basic laboratory skills, ornamental horticulture, and plant breeding and biotechnology. This program is formative for students interested in working in the ornamental horticulture or farming industries. The goal of this degree is to provide students with a basic understanding of the field of plant science and a strong academic foundation in this field of endeavor from which to engage in upper division coursework at a California State University campus. The Associate of Science Degree prepares students to continue their education at the California State University campus leading to a baccalaureate degree.

Associate in Science in Agriculture Plant Science for Transfer Degree (AS-T in Agriculture Plant Science) is intended for students who plan to transfer and complete a bachelor’s degree in Plant Science at a CSU campus. Students completing the AS-T degree in Agriculture Plant Science are guaranteed admission to the CSU system, but not necessarily to a particular CSU campus or major of their choice. Students should consult with a counselor for more information on university admission and transfer requirements as this AS-T in Agriculture Plant Science may not be the best option for students intending to transfer to a particular CSU campus or to a college or university that is not part of the CSU system.

To complete the degree, students must fulfill the following Associate Degree for Transfer requirements (pursuant to SB1440):

Completion of 60 semester units or 90 quarter units that are eligible for transfer to a California State University.

The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

Obtainment of a minimum grade point average of 2.0. A grade of “C” or better (or “P” if the course is taken on a pass/no pass basis) in all courses required for the major or area of emphasis.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply knowledge of chemical reactions in the soil and biological pathways to plant nutrition problems.
- Apply the fundamentals of biotechnology and plant genetics to address food security challenges in the context of a growing population.
- Utilize plant propagation techniques such as micro-propagation, grafting, budding, and propagation from seeds and cuttings.
- Research using basic laboratory and field data collection techniques, analyze data, and interpret graphs, charts, figures, and the significance of scientific results.
- Manage greenhouse, landscape, and field crops using economics, soil science, and horticultural principles.

MAJOR - REQUIRED COURSES

<table>
<thead>
<tr>
<th>SUBJECT &amp; NO.</th>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>ECON 1</td>
<td>Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 227</td>
<td>Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PLNT SC 103</td>
<td>Introduction to Soil Science</td>
<td>3</td>
</tr>
<tr>
<td>PLNT SC 711</td>
<td>Introduction to Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>PLNT SC 714</td>
<td>Principles of Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>PLNT SC 757</td>
<td>Plant Propagation and Production</td>
<td>3</td>
</tr>
</tbody>
</table>

MAJOR - TOTAL UNITS 24

GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

- LACCD GE NOT AVAILABLE WITH THIS MAJOR
- CSU GE CSU GE Breadth Certification Plan.......39 units
- IGETC Intersegmental GE Transfer Curriculum ...37 units
GEOLOGY

Associate of Science for Transfer Degree (AS-T)

(STATE CODE 35282)

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

This degree is intended for students transferring to a California State University campus. It is not a requirement for transfer but may give students an admission advantage at some CSU campuses. Not all CSU campuses accept this degree as fulfillment of lower-division major requirements. Students should meet with a counselor to determine if this degree is a good option for them. Information on which CSU campuses accept this degree can be found at http://www.sb1440.org/

PROGRAM INFORMATION

Associate in Science in Geology for Transfer Degree (AS-T in Geology) is intended for students who plan to transfer and complete a bachelor’s degree in Geology at a CSU campus. Students completing the AS-T degree in Geology are guaranteed admission to the CSU system, but not necessarily to a particular CSU campus or major of their choice. Students should consult with a counselor for more information on university admission and transfer requirements as this AS-T in Geology may not be the best option for students intending to transfer to a particular CSU campus or to a college or university that is not part of the CSU system. Students can only attain an AS-T degree in Geology if they complete the 30 units required for the major, along with the 37 units using the IGETC GE Plan.

To complete the degree, students must fulfill the following Associate Degree for Transfer requirements (pursuant to SB1440):

Completion of 60 semester units or 90 quarter units that are eligible for transfer to a California State University.

The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

Obtainment of a minimum grade point average of 2.0.

A grade of “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

Understand the various scales of change on or near Earth’s surface due to tectonic processes.

Recognize the relationship between human needs and activities and the geosphere.

Demonstrate a comprehension of the relationship of geology to other sciences, including chemistry, physics, and biology.

MAJOR - REQUIRED COURSES

<table>
<thead>
<tr>
<th>SUBJECT &amp; NO.</th>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOLOGY 1</td>
<td>Physical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOLOGY 6</td>
<td>Physical Geology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>GEOLOGY 2</td>
<td>Earth History</td>
<td>3</td>
</tr>
<tr>
<td>GEOLOGY 7</td>
<td>Earth History Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 101</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 102</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 261</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 262</td>
<td>Calculus II</td>
<td>5</td>
</tr>
</tbody>
</table>

MAJOR - TOTAL UNITS 30

GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

| LACCD GE | NOT AVAILABLE WITH THIS MAJOR |
| CSU GE | CSU GE Breadth Certification Plan | 39 units |
| IGETC | Intersegmental GE Transfer Curriculum | 37 units |
ASSOCIATE OF SCIENCE FOR TRANSFER DEGREE (AS-T) (STATE CODE 35334)

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

This degree is intended for students transferring to a California State University campus. It is not a requirement for transfer but may give students an admission advantage at some CSU campuses. Not all CSU campuses accept this degree as fulfillment of lower-division major requirements. Students should meet with a counselor to determine if this degree is a good option for them. Information on which CSU campuses accept this degree can be found at http://www.sb1440.org

PROGRAM INFORMATION

Associate of Science in Physics for Transfer Degree (AS-T in Physics) is intended for students who plan to transfer and complete a bachelor’s degree in Physics at a CSU campus. Students completing the AS-T degree in Physics are guaranteed admission to the CSU system, but not necessarily to a particular CSU campus or major of their choice. Students should consult with a counselor for more information on university admission and transfer requirements as this AS-T in Physics may not be the best option for students intending to transfer to a particular CSU campus or to a college or university that is not part of the CSU system. Students can only attain an AS-T degree in Physics if they complete the 30 units required for the major, along with the 37 units using the IGETC GE Plan.

To complete the degree, students must fulfill the following Associate Degree for Transfer requirements (pursuant to SB1440):

Completion of 60 semester units or 90 quarter units that are eligible for transfer to a California State University.

The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

Obtainment of a minimum grade point average of 2.0.

A grade of "C" or better in all courses required for the major or area of emphasis. "P" (Pass) grade is not an acceptable grade for courses in the major.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

Use algebra, calculus, and vector analysis to solve quantitative problems in classical and modern physics.

Conceptually reason using the laws of classical and modern physics to make qualitative predictions, explain real-world phenomena, and draw and interpret graphs and diagrams.

MAJOR - REQUIRED COURSES

<table>
<thead>
<tr>
<th>SUBJECT &amp; NO.</th>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICS 101</td>
<td>Physics for Engineers and Scientists I</td>
<td>5</td>
</tr>
<tr>
<td>PHYSICS 102</td>
<td>Physics for Engineers and Scientists II</td>
<td>5</td>
</tr>
<tr>
<td>PHYSICS 103</td>
<td>Physics for Engineers and Scientists III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 261</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 262</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 263</td>
<td>Calculus III</td>
<td>5</td>
</tr>
</tbody>
</table>

MAJOR - TOTAL UNITS 30

GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

LACCD GE NOT AVAILABLE WITH THIS MAJOR

CSU GE CSU GE Breadth Certification Plan 39 units

IGETC Intersegmental GE Transfer Curriculum ... 37 units
Associate Degree Requirements

The Associate in Arts (AA), Associate in Arts for Transfer (AA-T), Associate in Science (AS) and Associate in Science for Transfer (AS-T) Have the Following Common Requirements (Title 65 Section 55063)

**Unit Requirement** (Board Rule 6201.10)

A minimum of 60 semester units of course credit in a selected curriculum with at least 18 semester units of study in a major or area of emphasis and at least 18 semester units of study in general education. Associate degrees for transfer, as defined in California Education Code §66746, must be aligned with transfer model curricula as approved by the State Chancellor and must require 60 semester units for completion, with at least 18 units of study in a major/area of emphasis and completion of Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education Breadth Requirements.

**Scholarship Requirement** (Board Rule 6201.11)

A "C" (2.0) grade average or better in all work attempted in the curriculum upon which the degree is based. Effective for all students admitted for the Fall 2009 term or any term thereafter, each course counted toward the major requirements must be completed with a grade of "C" or better or a "P" if the course is taken on a "pass-no pass" basis.

**Competency Requirement** (LACCD E-79 and Board Rule 6201.12)

The following courses and examinations are approved to meet the competency requirement for the Associate Degree for all students entering Fall 2009 or later* as defined in Board Rule 6201.12.

**Mathematics Competency**

The competency requirement in mathematics for the Associate Degree may be met by completion of one of the following:

1) Completion of one of the following courses (or its equivalent at another college) with a grade of "C" or better:
   - MATH 120, 123C, 124A & B, 125, or 127 & 128 or any higher-level mathematics courses with a prerequisite of at least mathematics 125 or its equivalent.
   - Calculus BC
   - Statistics
2) A score of 3 or higher on one of the following AP Exams:
   - Calculus BC
   - Calculus AB
   - Statistics
3) Completion of the college assessment exam in mathematics and achievement of a score determined comparable to satisfactory completion of intermediate algebra (Mathematics 123C, 124A & B, 125, or 127 & 128).
   Students who place into a mathematics course above the level of intermediate algebra are deemed to have met the competency requirement. (Board Rule 6201.12, Title 5, CCR, 55063).
   - Note: Assessment results expire after 2 years

**Reading and Written Expression Competency**

The competency requirement in reading and written expression for the Associate Degree may be met by completion of one of the following:

1) Completion of ENGLISH 101 (or its equivalent at another college) with a grade of "C" or better.
2) A score of 3 or higher on one of the following AP Exams:
   - English Language and Composition
   - English Composition and Literature
3) In meeting the Reading and Written Expression competency requirement, course work is the primary measure of competency.

**Competency Requirements and General Education Area D**

Assessment cannot be used to waive General Education requirements. Students who meet Mathematics and/or Reading and Written Expression competencies through assessment must still complete the LACCD Associate Degree Area D General Education course and unit requirements.

*Students with continuous enrollment within the LACCD prior to Fall 2009 should see their appropriate catalog for competency requirements.

**Residency Requirement** (Board Rule 6201.13)

Students must complete no fewer than 12 units at the college conferring the degree.

When the same major is offered at multiple colleges in the LACCD, the degree shall be conferred by the college where the student has taken the majority (greater than 50.0%) of units in the major.
Exceptions to residence requirements for the associate degree may be made by the governing board when it determines that an injustice or undue hardship would be placed on the student.

**General Education Requirement (Board Rule 6201.14)**

General Education is designed to introduce students to the variety of means through which people comprehend the modern world.

Developing and implementing a specific philosophy of General Education is a responsibility of each college, since each must be sensitive to the unique educational needs and learning environment of its students. Each college shall publish its statement of philosophy in their catalog.

The following three general education plans are offered at the colleges of the Los Angeles Community College District: the LACCD General Education Plan; the California State University General Education Breadth Plan (CSU GE-Breadth Plan); the Intersegmental General Education Transfer Curriculum (IGETC).

**Double-Counting of Coursework (Board Rule 6201.17)**

A course may only be counted once for General Education purposes. However, a course may be used to simultaneously satisfy both a General Education requirement and a major/area of emphasis requirement. There is no limit on the number of courses that may be used simultaneously in this manner.

Students may also simultaneously apply the same course toward satisfaction of the LACCD General Education Plan, the CSU GE Breadth Certification requirements and the Intersegmental General Education Transfer Curriculum (IGETC) requirements.

**Associate Degrees for Transfer and Local Associate Degrees (Board Rule 6201.18)**

A student who completes an Associate Degree for Transfer (ADT) in a particular major/area of emphasis may also be awarded a local associate in the same major/area of emphasis provided that the student completes any additional coursework required for the local associate degree.

**Catalog Rights (Board Rule 6202)**

For these purposes, a catalog year is defined as beginning with the fall semester through the subsequent summer. A student remaining in continuous attendance in the Los Angeles Community College District may elect to satisfy the degree, certificate or graduation requirements in effect at the college from which the student will either earn his/her degree, certificate or graduate:

1. at the time the student began such attendance at the college, or
2. allow students to select an intervening catalog in years between the time the student began continuous attendance and time of graduation, or
3. at the time of graduation.

For the sole purpose of satisfying graduation competency requirements, students entering the Los Angeles Community College District prior to Fall 2009 who remain in continuous attendance within the LACCD may graduate from any LACCD College by satisfying graduation competency by either:

1. fulfilling competency requirements in place at the time the student began such attendance within the district, or
2. fulfilling competency requirements in place at the time of graduation.

For the purposes of implementing this policy, the college may develop a policy to:

1. authorize or require substitutions for discontinued courses; or
2. require a student changing his/her major to complete the major requirements in effect at the time of the change.

The college's policy shall be developed in consultation with the college Academic Senate in accordance with the provisions of Chapter XA11 of the Board Rules – ACADEMIC SENATE AND THE BOARD OF TRUSTEES SHARED GOVERNANCE POLICY, and published in all college catalogs under appropriate headings.

This policy does not apply to college programs which are governed or regulated by outside government agencies or which require licensure or certification through one of these agencies.

**Continuous Attendance (Board Rule 6203)**

“Continuous attendance” means no more than one semester absence within a school year, excluding Summer Sessions and Winter Intersession.

Students granted a “military withdrawal” under the provisions of Board Rule 6701.10, will be considered to be in “continuous attendance” for their required period of military service.

**Additional and Concurrent Degrees (Board Rule 6204)**

Additional Associate Degrees: Students who have previously earned an associate degree from a United States regionally accredited institution will be granted an additional associate degree when the following requirements have been met:

1. Pursuant to catalog rights, described in Board Rule 6202, completion of all current degree requirements – i.e., scholarship, residency, competency, general education and major requirements.
2. For local associate degrees, completion of a minimum of six (6) units in the major at the college awarding the degree. For the Associate Degrees for Transfer (ADTs), there is no major unit minimum requirement that must be completed at the college awarding the degree.
3. Major course requirements completed in previous degrees awarded can be used again for additional degrees.
4. All courses that count towards the associate degree major or area of emphasis must be satisfactorily completed with a grade of "C" or higher or "P" (pass).

5. There is no limit to the number of additional associate degrees that can be awarded provided that all the above requirements have been met.

6. Completion of any additional requirements, including new units, as determined by the college through collegial consultation with the college Academic Senate in accordance with the provisions of Chapter XVI of the Board Rules – Academic Senate and the Board of Trustees Shared Governance Policy.

Concurrent degrees: Concurrent degrees are degrees awarded in the same semester. Students may petition and be awarded concurrent associate degrees in different majors if the following criteria are met:

1. Pursuant to catalog rights, described in Board Rule 6202, completion of all current degree requirements: scholarship, residency, competency, general education and major requirements.

2. There is no maximum number of concurrent degrees that a student may be awarded.

3. If a course is a major requirement for each concurrent degree, it may be applied toward satisfaction of each major degree requirement.

4. Completion of the General Education requirements for one associate degree will fulfill the general education requirements for concurrent degrees, if the same general education pattern applies to the additional degree. If each degree requires the completion of different general education patterns, the general education pattern of each degree must be fulfilled. Courses may be applied toward the general education requirements for each concurrent degree.

5. All courses that count towards the associate degree major or area of emphasis must be satisfactorily completed with a grade of "C" or higher or "P" (pass).

6. The LACCD does not offer double majors.

Part 1 > General Education (GE) PLAN

The general education path you pick depends on whether or not you plan to transfer, and what major you are choosing. If you already know your major, you may want to do Parts 1 and 2 simultaneously.

Which plan should you choose?

The choice of general education plans is listed with each major on the following pages.

LACCD GE

GENERAL STUDIES GENERAL EDUCATION PLAN This associate-level general education plan is appropriate for students planning to obtain an associate degree, but does not necessarily prepare students to transfer and earn a baccalaureate degree.

CSUGE

CSU GENERAL EDUCATION BREADTH CERTIFICATION PLAN This baccalaureate-level general education plan fulfills the associate degree general education requirements and is accepted as fulfillment of lower-division general education requirements at all California State University campuses.

IGETC

IGETC PLAN (INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM) This baccalaureate-level general education plan fulfills the associate degree general education requirements and is accepted as fulfillment of lower-division general education requirements at all University of California and California State University Campuses.

Part 2 > Major

Follow the requirements for a Major. Degree and Certificate programs are listed on page 70.

Part 3 > Electives

Pick Associate degree applicable courses as needed to reach 60 units.

Graduation and Completion Rates

The California Community Colleges State Chancellor's Office provides completion and transfer rates for every community college in California, including Los Angeles Pierce College. For more information on the graduation or completion rates for certificate or degree-seeking, full-time, first-time undergraduate students, please access the link provided: http://scorecard.cccco.edu/scorecard.aspx
Credit-By-Exam courses (Effective Spring 2017)

The following courses were added:

- Art 604, 605
- Computer Science 581
- Multimedia 200, 805

UC Transferable Course Agreements (Effective Fall 2016)

The following courses are UC transferable:

- CHICANO 7
- CHICANO 8
- CO SCI 508
- CO SCI 559
- COUNSEL 22
- DANCEST 826
- EARTH 3
- HEALTH 43
- KIN 217-1
- KIN 352-1
- KIN 373-1
- KIN 373-2
- MEDIART 109
- THEATER 410

The following courses (Geology 22A-D) UC transferability and IGETC applicability were removed beginning Fall 2013. See red strikethroughs below:

22A
Geology Field Study - Mojave (1) CSU
Lecture 0.5 hour. Laboratory 1 hour.
This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the selected field area. This course includes multi-day field excursions to various locales of geological interest and may involve camping in primitive wilderness environments.
(CSU GE Area B3 • Upon completion of Geology 22 A, B, C, & D.)

22B
Geology Field Study - Basin and Range (1) CSU
Lecture 0.5 hour. Laboratory 1 hour.
This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the selected field area. This course includes multi-day field excursions to various locales of geological interest and may involve camping in primitive wilderness environments.
(CSU GE Area B3 • Upon completion of Geology 22 A, B, C, & D.)

22C
Geology Field Study - Yosemite (1) CSU
Lecture 0.5 hour. Laboratory 1 hour.
This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the selected field area. This course includes multi-day field excursions to various locales of geological interest and may involve camping in primitive wilderness environments.
(CSU GE Area B3 • Upon completion of Geology 22 A, B, C, & D.)
This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the selected field area. This course includes multi-day field excursions to various locales of geological interest and may involve camping in primitive wilderness environments.

(CSU GE Area B3 • Upon completion of Geology 22 A, B, C, & D.)