

## Los Angeles Pierce College 2021-2022 General Catalog Addendum A

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### KEY

- Underlined text = Addition
- ~~Strikethrough text~~ = Deletion

### New CSU Transferable Courses

- The following courses are CSU transferable, effective Spring 2022: ADDICST 091; ANML SC 181A, 181B, 181C, 181D, 623; A S T 006, 007, 008, 009, 020, 023, 024, 025, 041, 043, 044, 048, 053, 055; CAOT 023, 023F, 023G, 055, 063, 065, 067, 079, 087, 096, 100, 114, 120, 128; VETTECH 180, 481

### New Los Angeles Pierce College CLEP Course Credit Applicable to Associate Degree Major and/or Certificate Requirements only

- New Los Angeles Pierce College CLEP Course Credit Applicable to Associate Degree Major and/or Certificate Requirements only

### New Los Angeles Pierce College IB Course Credit Applicable to Degree Major and/or Certificate Requirements only

- New Los Angeles Pierce College IB Course Credit Applicable to Associate Degree Major and/or Certificate Requirements only

### Revision to Engineering A.S.

- Added five pathways to CSUN
  - Mechanical Engineering Pathway
  - Civil Engineering Pathway
  - Electrical Engineering Pathway
  - Manufacturing Systems Engineering Pathway
  - Computer Engineering Pathway

### Revision to LAPC General Education Pattern 2021-2022

- Added course to Area A: BIOTECH 003
- Added courses to Area D2: CIS 173; CS 111, 112, 114, 131, 213, 216
- Added courses to Area E2: ANML SC 621, 622

### Revision to Los Angeles Pierce College Course Credit Applicable Degree Major and/or Certificate Requirements only

- Added STAT 101 to AP Statistics

### **Correction to Music AA-T General Education Plans**

- CSU GE is available with this major

### **Correction to Prerequisite**

- Prerequisite of JOURNAL 109 corrected from ENGLISH 103 to ENGLISH 101.

### **Correction to Courses**

- Removed “Same as Chicano Studies 44 and History 24. Credit not given for both courses.”

### **Correction to Courses Offered on a Credit-By-Exam Basis**

- Added an asterisk (\*) next to courses that were approved on a Credit-By-Exam through High School articulation. Removed DANCETQ 141 from the list.

### **Revision to ADT website**

- <https://adegreewithaguarantee.com/> is being replaced by <https://icangotocollege.com/>

### **Revision to Procedure for Requesting Course Substitutions and Pass-Alongs**

- Updated language for Course Substitutions and Pass-Alongs under Procedure for Requesting the Degree

## New CSU Transferable Courses

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- CAOT 023, 023F, 023G, 055, 063, 065, 067, 079, 087, 096, 100, 114, 120, 128
- VETTECH 180, 481

## New Los Angeles Pierce College CLEP Course Credit Applicable to Associate Degree Major and/or Certificate Requirements only

This course credit is *not* applicable to Los Angeles Pierce College Associate Degree general education requirements or units awarded. For this information, reference the CLEP chart on the previous pages. *Additionally, Pierce course credit is in no way related to the CLEP policy of the CSU GE Breadth Certification Plan.*

CLEP EXAMINATION	SCORE	PIERCE COURSE CREDIT	UNITS
Biology	50	BIOLOGY 003	4
French Level I	50	FRENCH 001	5
French Level II	59	FRENCH 002	5
Human Growth and Development	50	PSYCH 041	3
Introductory Psychology	50	PSYCH 001	3
Principles of Macroeconomics	50	ECON 002	3
Principles of Microeconomics	50	ECON 001	3
Spanish Level I	50	SPANISH 001	5
Spanish Level II	63	SPANISH 002	5

## New Los Angeles Pierce College IB Course Credit Applicable to Associate Degree Major and/or Certificate Requirements only

This course credit is *not* applicable to Los Angeles Pierce College Associate Degree general education requirements or units awarded. For this information, reference the IB chart on the previous pages. *Additionally, Pierce course credit is in no way related to the IB policy of the CSU GE Breadth Certification Plan or the IGETC.*

IB EXAMINATION	SCORE	PIERCE COURSE CREDIT	UNITS
IB Biology HL	5 (ALL)	BIOLOGY 003 or 006	4 or 5
IB Chemistry HL	5 (ALL)	CHEMISTRY 060 or 101	5
IB Economics HL	4, 5 (ALL)	ECON 001 and 002	6
IB Psychology HL	5	PSYCH 001	3

## Revision to Engineering A.S.

### ENGINEERING

#### Associate of Science Degree (STATE CODE 02826)

#### PROGRAM INFORMATION

This degree is designed for the student planning to transfer to a four-year college or university as an engineering major. Meeting the minimum requirements for the degree, however, will not qualify one for admission to upper division Engineering. Students are urged to see a counselor for qualifying courses.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

*See page 288 of this catalog for more information on transfer requirements and resources.*

**PROGRAM LEARNING OUTCOMES**

*Upon completion of this program, students will:*

- Students will demonstrate an awareness of engineering careers and educational pathways.
- Students will be able to formulate and carry out plans to solve engineering problems using fundamental principles of chemistry and physics.
- Students will be familiar with computer programming and/or computer design tools used in solving engineering problems.

**MAJOR - REQUIRED COURSES**

SUBJECT & NO.	COURSE	UNITS
CHEM 101*	General Chemistry I .....	5
MATH 261*	Calculus I .....	5
MATH 262*	Calculus II .....	5
MATH 263*	Calculus III .....	5
MATH 275*	Ordinary Differential Equations .....	3
PHYSICS 101*	Physics for Engineers and Scientists I .....	5
PHYSICS 102*	Physics for Engineers and Scientists II .....	5
<b>Select a minimum of 9 semester units from the following. A minimum of one course must be selected from each group: 9-13</b>		
<b>GROUP 1:</b>		
BIOLOGY 006*	General Biology I.....	5
BIOLOGY 007*	General Biology II.....	5
CHEM 102*	General Chemistry II .....	5
ECON 001*	Principles of Economics I .....	3
EGD TEK 101	Engineering Graphics.....	3
EGD TEK 210*	3D Computer-Aided Design .....	3
EGD TEK 310*	Engineering Design .....	3
ELECTRN 004A*	..... Fundamentals of Electronics I .....	3
ELECTRN 004B*	..... Fundamentals of Electronics I .....	1
ENG GEN 101	Introduction to Science, Engineering and Technology.....	2
ENG GEN 122*	Programming and Problem-Solving in MATLAB.....	3
ENG GEN 131*	Statics .....	3
ENG GEN 151*	Materials of Engineering.....	3
ENG GEN 220*	Electrical Circuits I.....	4
GEOLOGY 001	Physical Geology .....	3
MATH 270*	Linear Algebra.....	3
PHYSICS 103*	Physics for Engineers and Scientists III .....	5
<b>GROUP 2:</b>		
CS 111	Programming in Visual Basic .....	3
CS 114*	Programming in C .....	3
CS 116	Programming in C++ .....	3
CS 130*	Introduction to Computer Architecture and Organization.....	3
CS 131*	Discrete Structures for Computer Science...	3
CS 136*	Introduction to Data Structures.....	3
CS 216*	Object-Oriented Programming in C++ .....	3

CS 236*	Advanced Data Structures and Introduction to Databases.....	3
ENG GEN 122*	Programming and Problem-Solving in MATLAB .....	3

**MAJOR - TOTAL UNITS 42-46**

The pathways below are designed to help students meet the lower division requirements for transfer to California State University, Northridge in the various engineering majors. Note that these pathways list more than the minimum required course for the A.S. degree. Course requirements vary by major and institution, and information is subject to change. Students are strongly encouraged to meet with a counselor and consult assist.org to create an educational plan.

**Mechanical Engineering Pathway, transfer to CSUN:**

CS 111	Programming in Visual Basic .....	3
EGD TEK 101*	Engineering Graphics .....	3
EGD TEK 210*	3D Computer-Aided Design .....	3
EGD TEK 310*	Engineering Design.....	3
ENG GEN 101	Introduction to Science, Engineering and Technology .....	2
ENG GEN 131*	Statics .....	3
ENG GEN 151*	Materials of Engineering .....	3

**TOTAL ELECTIVE UNITS FOR MECHANICAL ENGINEERING (CSUN) PATHWAY 19**

**Civil Engineering Pathway, transfer to CSUN:**

ENG GEN 101	Introduction to Science, Engineering and Technology .....	2
ENG GEN 131*	Statics .....	3
ENG GEN 151*	Materials of Engineering .....	3
ENG GEN 220*	Electrical Circuits I .....	4
<b>Select one of the following:</b>		<b>3-5</b>
BIOLOGY 007*	General Biology II .....	5
GEOLOGY 001	Physical Geology .....	3

**TOTAL ELECTIVE UNITS FOR CIVIL ENGINEERING (CSUN) PATHWAY 15-17**

**Electrical Engineering Pathway, transfer to CSUN:**

CS 114*	Programming in C .....	3
ENG GEN 101	Introduction to Science, Engineering and Technology .....	2
ENG GEN 131*	Statics .....	3
ENG GEN 151*	Materials of Engineering .....	3
ENG GEN 220*	Electrical Circuits I .....	4

**TOTAL ELECTIVE UNITS FOR ELECTRICAL ENGINEERING (CSUN) PATHWAY 15**

**Manufacturing Systems Engineering Pathway, transfer to CSUN:**

EGD TEK 101*	Engineering Graphics .....	3
ENG GEN 101	Introduction to Science, Engineering and Technology .....	2
ENG GEN 131*	Statics .....	3
ENG GEN 151*	Materials of Engineering .....	3

ENG GEN 220\* Electrical Circuits I..... 4

**TOTAL ELECTIVE UNITS FOR MFG. SYS. ENGINEERING (CSUN) PATHWAY 15**

**Computer Engineering Pathway, transfer to CSUN:**

CS 116 Programming in C++ ..... 3

CS 136\* Introduction to Data Structures..... 3

CS 216\* Object-Oriented Programming in C++..... 3

CS 236\* Advanced Data Structures and Introduction to Databases ..... 3

ENG GEN 220\* Electrical Circuits I..... 4

**Select one of the following: 3-5**

BIOLOGY 006\* General Biology I..... 5

BIOLOGY 007\* General Biology II..... 5

CHEM 102\* General Chemistry II ..... 5

MATH 270\* Linear Algebra ..... 3

PHYSICS 103\* Physics for Engineers and Scientists III ..... 5

**TOTAL ELECTIVE UNITS FOR COMPUTER ENGINEERING (CSUN) PATHWAY 19-21**

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

LAPC GE LAPC General Education Plan.....21 units

CSU GE CSU GE Breadth Certification Plan....39 units

IGETC Intersegmental GE Transfer Curriculum 34-37 units

\*See Catalog course description for prerequisites and/or corequisites.

**Revision to LAPC General Education Pattern 2021-2022**

**A. Natural Sciences**

3 Sem/4 Qtr Units Minimum

ANATOMY 001; ANML SC 511; ANTHRO 101, 111; ASTRON 001, 002; BIOLOGY 003, 006, 007, 010, 011ABC, 012ABC, 110, 121, 122, 123; BIOTECH 003; CHEM 051, 060, 101, 102, 211, 212, 221; EARTH 003; ELECTRN 004A, 004B; ENV SCI 001, 002, 007; GEOG 001, 003, 015, 017, 019, 023; GEOLOGY 001, 002, 006, 007, 010, 012, 015, 022ABCDEF; METEOR 003, 004, 005; MICRO 001, 020; OCEANO 001, 010; PHYS SC 004, 006; PHYSICS 006, 007, 012, 066, 067, 101, 102, 103; PHYSIOL 001; PLNT SC 103, 711, 901; PSYCH 002, 073

**D2. COMMUNICATION AND ANALYTICAL THINKING**

3 Sem/4 Qtr Units Minimum

ACCTG 001; ADM JUS 305; COMM 101, 104, 121, 122, 151, 190; CIS 173; CS 111, 112, 114, 131, 213, 216; JOURNAL 109; LIB SCI 102; MATH 120, 125, 134, 215, 227, 228A, 228B, 238, 240, 260, 261, 262, 263; PHILOS 005, 006, 009; POL SCI 005; PSYCH 066, 074; SOC 004; STAT 101

**E2. ONE ACTIVITY COURSE**

1 Unit Minimum

ANML SC 621, 622, 623; DANCEST 301, 452, 801, 802, 806, 807, 814, 815, 820, 821, 822, 826; DANCETQ 101, 111, 121, 141, 535, 536, 570, 571, 572, 573; DNCESPC 171, 331, 441, 442, 491, 492; HEALTH 002; Any DANCEST, DANCETQ, DNCESPC, KIN, or KIN ATH activity course.

**Revision to Los Angeles Pierce College Course Credit Applicable to Associate Degree Major and/or Certificate Requirements only**

AP EXAMINATION	SCORE	PIERCE COURSE CREDIT	UNITS
AP Statistics	3, 4, 5	MATH 227 <u>or</u> STAT 101	4

**Correction to Music AA-T General Education Plans**

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

- LAPC GE NOT AVAILABLE WITH THIS MAJOR
- CSU GE ~~NOT AVAILABLE WITH THIS MAJOR~~ CSU GE Breadth Certification Plan..... 39 units
- IGETC Intersegmental GE Transfer Curriculum ..... 37 units
- IGETC for UC An AA-T or AS-T may be awarded without IGETC 1C. However, without IGETC 1C the student will be ineligible for admission to a CSU campus. IGETC 1C must be completed prior to transfer to meet minimum CSU entrance requirements ..... 34 units

\*See Catalog course description for prerequisites and/or corequisites.

**Correction to Prerequisite**

**109 Critical Thinking and Media Literacy (3) UC:CSU**

Lecture 3 hours.

Prerequisite: English ~~403~~101 with a grade of "C" or better.

## Correction to Courses

### 016 Mexican Civilization (3) UC:CSU

Lecture 3 hours.

~~Same as Chicano Studies 44 and History 24. Credit not given for both courses.~~

Students survey the diverse cultures of Mexico from Pre-Columbian to present times, with a focus on the country's quest for sovereignty, independence, and an equitable society. (CSU GE Area D • IGETC Area 4)

## Correction to Courses Offered on a Credit-By-Exam Basis

Animal Science	401*, 501, 510
Automotive Service Technology	001, 002, 003, 004, 005, 006, 007, 025*
Art	102, 201*, 501*, 604*, 605
Biology	123
Computer Information Systems	101*
Dance Techniques	<del>141</del> , 142*
Industrial Technology	130, 145, 146, 230, 330
Journalism	101*
Media Arts/Multimedia	MEDIART 101*, 805, MULTIMD 200
Music	101, 216-1, 216-2, 216-3, 216-4, 217-1, 217-2, 217-3, 217-4, 321
Nursing	400, 402, 403, 404, 405, 406, 407, 408, 414, 415, 441, 442
Photography	009*
Physics	012
Plant Science	701*, 711*, 714*, 718*, 812, 827*, 896B*, 896C
Veterinary Technology	180

[\\*Through High School Articulation.](#)

## Revision to ADT website

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

<https://adegreewithaguarantee.com/> <https://icangotocollege.com/>

## Revision to Procedure for Requesting Course Substitutions and Pass-Alongs

### COURSE SUBSTITUTIONS AND PASS-ALONGS

If you have completed coursework at other schools that you believe meet some of your degree or certificate requirements, you may petition for a course substitution ~~with the counseling office. Please consult a counselor for general education and major course requirements.~~ Please consult a counselor to request course evaluation for IGETC, CSU GE, LA Pierce GE, Competency or Associate Degree for Transfer coursework. Consult with the department chair for major coursework for Associate degrees and Certificates.