Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: California Polytechnic University, San Luis Obispo 2022-2023 General Catalog, Quarter	From: Sonoma State University 2022-2023 General Catalog, Semester

COMPUTER SCIENCE, B.S.

TRANSFER INFORMATION & ONLINE RESOURCES

WHAT COURSE CREDIT WILL TRANSFER FOR THIS MAJOR?

This view is By Major and shows lower division courses within BS Computer Science for the academic year (Fall to Summer) 2022-2023 – these are listed to the left, with articulated courses from the sending institution listed to the right. Where combinations of courses exist, some duplication may occur.

Courses are listed under three sections: **Major Courses, Support Courses** and **Other Courses**. All students in the major will take **Major and Support Courses**. Courses that are either in Concentrations, Areas of Emphasis or an Elective for the major are grouped in the **Other Courses** section. As a result, this section will vary in capacity and not all courses listed may be relevant to the course of study being pursued. Resources are provided below to confirm the exact lower division courses required.

Upper Division, General Education (GE) and free elective coursework are not listed here.

Both GE and course credit are awarded when an incoming articulated course is approved for GE. Where articulation is established but the transfer course is not approved for GE, only course credit is awarded.

As noted at the top of this agreement, Cal Poly SLO is on the Quarter system – all Cal Poly course units will reflect this.

WHAT COURSES NEED TO BE TAKEN TO BE A COMPETITIVE TRANSFER APPLICANT?

Not all the articulated courses listed below are required to be a competitive transfer applicant for this major.

It is ESSENTIAL that transfer applicants first review the Admissions webpages concerning Selection Criteria for Transfer Students and Major Specific Transfer Criteria.

Selection Criteria for Transfer Students can be found here:

https://www.calpoly.edu/admissions/transfer-student/selection-criteria

Major Specific Transfer Criteria is linked from the Selection Criteria page, and indicates both required and recommended coursework. Applicants should take note of these courses, and refer to their potential articulation in ASSIST through either Articulation Agreements by Major, by Department or by Prefix. Credit is extended based on the academic year in which the transfer course was taken.

RESOURCES TO USE WITH ASSIST

ASSIST only provides certain information; use the resources below for a more complete overview of this major.

2022-2026 Catalog information on BS Computer Science can be found here: http://catalog.calpoly.edu/

The Curriculum Sheet for BS Computer Science can be found here: http://flowcharts.calpoly.edu

NOTE CONCERNING "OTHER COURSES" SECTION FOR THIS MAJOR

- This major has five concentrations: Artificial Intelligence & Machine Learning, Data Engineering, Game Development, Graphics, and Privacy & Security. A sixth option of General Curriculum is also available. Lower division courses which may be in one or more of these concentrations are listed.
- This major has no areas of emphasis.

MAJOR COURSES

CSC 101 - Fundamentals of Computer Science (4.00) Same-As: CPE 101	←	No Course Articulated
CSC 123 - Introduction to Computing (4.00) Same-As: CPE 123	←	No Course Articulated
CSC 202 - Data Structures (4.00) Same-As: CPE 202	←	No Course Articulated

CSC 203 - Project-Based Object-Oriented Programming and Design (4.00) Same-As: CPE 203	←	No Course Articulated
CPE 101 - Fundamentals of Computer Science (4.00) Same-As: CSC 101 **--- And ---** **CPE 202** - Data Structures (4.00) Same-As: CSC 202 **--- And ---** **CPE 203** - Project-Based Object-Oriented Programming and Design (4.00) Same-As: CSC 203	←	No Course Articulated
CSC 225 - Introduction to Computer Organization (4.00) Same-As: CPE 225	←	No Course Articulated
CSC 248 - Discrete Structures (4.00)	←	No Course Articulated

SUPPORT COURSES

MATH 141 - Calculus I (4.00) Same-As: HNRS 141	←	**MATH 161** - Differential & Integral Calc I (4.00)
MATH 142 - Calculus II (4.00) Same-As: HNRS 142	←	**MATH 211** - Differential & Integral Calc II (4.00)
MATH 141 - Calculus I (4.00) Same-As: HNRS 141 **--- And ---** **MATH 142** - Calculus II (4.00) Same-As: HNRS 142	←	**MATH 161** - Differential & Integral Calc I (4.00) **--- And ---** **MATH 211** - Differential & Integral Calc II (4.00)
MATH 143 - Calculus III (4.00) Same-As: HNRS 143	←	**MATH 211** - Differential & Integral Calc II (4.00)
MATH 206 - Linear Algebra I (4.00)	←	**MATH 222** - Elementary Applied Linear Algebra (3.00)
--- Or ---		
MATH 244 - Linear Analysis I (4.00) Same-As: HNRS 244	←	**MATH 241** - Linear Algebra with Applications in Differential Equations (4.00)
PHIL 230 - Philosophical Classics: Knowledge & Reality (4.00) Same-As: HNRS 230	←	No Course Articulated
--- Or ---		
PHIL 231 - Philosophical Classics: Ethics and Political Philosophy (4.00) Same-As: HNRS 231	←	No Course Articulated

Select 4 Unit(s) from the following

BIO 213 - Life Science for Engineers (2.00) **--- And ---** **BMED 213** - Bioengineering Fundamentals (2.00) Same-As: BRAE 213	←	No Course Articulated
BIO 111 - General Biology (4.00)	←	**BIOL 110** - Biological Inquiry (3.00)
BIO 161 - Introduction to Cell and Molecular Biology (4.00)	←	**BIOL 123** - Molecular and Cell Biology (4.00)
BOT 121 - General Botany (4.00)	←	No Course Articulated
MCRO 221 - Microbiology (4.00)	←	**BIOL 240** - Medical Microbiology (4.00)

Select 4 Unit(s) from the following

BIO 111 - General Biology (4.00)	←	**BIOL 110** - Biological Inquiry (3.00)
BIO 161 - Introduction to Cell and Molecular Biology (4.00)	←	**BIOL 123** - Molecular and Cell Biology (4.00)

BOT 121 - General Botany (4.00)	←	No Course Articulated
CHEM 124 - General Chemistry for Physical Science and Engineering I (4.00)	←	**CHEM 115A** - General Chemistry (5.00)
MCRO 221 - Microbiology (4.00)	←	**BIOL 240** - Medical Microbiology (4.00)
PHYS 141 - General Physics I (4.00) Same-As: HNRS 134	←	**PHYS 114** - Introduction to Physics I (4.00) **--- And ---** **PHYS 116** - Introductory Laboratory Experience (1.00)

Select 12 Unit(s) from the following

CHEM 124 - General Chemistry for Physical Science and Engineering I (4.00) **--- And ---** **CHEM 125** - General Chemistry for Physical Science and Engineering II (4.00) **--- And ---** **CHEM 126** - General Chemistry for Physical Science and Engineering III (4.00)	←	**CHEM 115A** - General Chemistry (5.00) **--- And ---** **CHEM 115B** - General Chemistry (5.00)
--- Or ---		
PHYS 141 - General Physics I (4.00) Same-As: HNRS 134 **--- And ---** **PHYS 142** - General Physics II (4.00) Same-As: HNRS 132 **--- And ---** **PHYS 143** - General Physics III (4.00)	←	**PHYS 114** - Introduction to Physics I (4.00) **--- And ---** **PHYS 116** - Introductory Laboratory Experience (1.00) **--- And ---** **PHYS 214** - Introduction to Physics II (4.00) **--- And ---** **PHYS 216** - Introductory Laboratory (1.00)

OTHER COURSES (CONCENTRATION/EMPHASIS/ELECTIVES)

****REFER TO CATALOG****
****REFER TO TOP OF AGREEMENT****
Only lower division courses listed

CHEM 216 - Organic Chemistry I (5.00)	←	**CHEM 335A** - Organic Chemistry (3.00)
CHEM 217 - Organic Chemistry II (4.00)	←	**CHEM 335B** - Organic Chemistry (3.00) **--- And ---** **CHEM 336B** - Organic Chemistry Lab II (2.00)
CHEM 218 - Organic Chemistry III (3.00)	←	No Course Articulated
EE 201 - Electric Circuit Theory (3.00) **--- And ---** **EE 251** - Electric Circuits Laboratory (1.00)	←	No Course Articulated
MATH 241 - Calculus IV (4.00) Same-As: HNRS 241	←	**MATH 261** - Multivariable Calculus (4.00)
MATH 242 - Differential Equations I (4.00)	←	No Course Articulated
MATH 248 - Methods of Proof in Mathematics (4.00)	←	**MATH 220** - Reasoning and Proof (4.00)
ME 211 - Engineering Statics (3.00) Same-As: HNRS 211	←	No Course Articulated
ME 212 - Engineering Dynamics (3.00) Same-As: HNRS 214	←	No Course Articulated

ISLA 240 - Introduction to Media Arts and Technologies (4.00)	←	No Course Articulated
--- Or ---		
ART 182 - Foundation in Digital Art I (4.00)	←	No Course Articulated

--- Or ---		
ART 183 - Foundation in Digital Art II (4.00)	←	No Course Articulated

END OF AGREEMENT