Program map for Computer Science Associate in Science - Transfer (AS-T) for WSU Vancouver

2025-26

Begin studies toward a Bachelor of Science degree in Computer Science. For the AS-T degree in Computer Science, various courses are offered such as calculus, physics, and computer science. A student can also take individual course in areas of interest to deepen knowledge and understanding. This degree is intended for WSU-V transfer students.

View this program in the LCC Catalog (lowercolumbia.edu/publications/catalog/programs/STEM-AST-Computer-Science-WSU-V)

See also

- Degree Requirements for Science, Technology, Engineering and Math (STEM) programs (lowercolumbia.edu/programs/stem)
- Course descriptions in the LCC Catalog (lowercolumbia.edu/publications/catalog/courses)
- Distribution lists in the LCC Catalog (lowercolumbia.edu/publications/catalog/distribution-lists)

Important: Many course sequences only begin in fall quarter. Check with your program advisor.

By Quarter Overview

First Quarter

- COLL 101: College Success 101 (2 credits)
- CS 170: Computer Programming (5 credits)
- ENGL& 101: English Composition I (5 credits)
- MATH& 151: Calculus I (5 credits)

Second Quarter

- CS 275: Object-Orientated Programming (5 credits)

Checked for Accessibility: CR, ECR, 08/06/2025, Adobe Accessibility Checker

- MATH& 152: Calculus II (5 credits)
- MATH& 215: Discrete Structures (5 credits)

Third Quarter

- MATH& 153: Calculus III (5 credits)
- MATH 220: Linear Algebra (5 credits)
- Choose one for elective credit:
  - ECON& 201/202(SS), SOC& 101(SS), POLS& 101/202(SS), PSYC& 100/200(SS), ART& 100(HUM), DRMA& 101(HUM), HIST& 126(HUM)/127(SS). Must include 5 credits each Social Science(SS) and Humanities(HUM)

Fourth Quarter

- CS 270: Data Structures I (5 credits)
- PHYS& 221: Engineering Physics I w/ Lab (5 credits)
- HIST& 128: Western Civ III (5 credits) (Meets LCC Diversity/WSU Root requirements)

Fifth Quarter

- PHYS& 222: Engineering Physics II w/ Lab (5 credits)
- Choose one for elective credit:
  - ECON& 201/202(SS), SOC& 101(SS), POLS& 101/202(SS), PSYC& 100/200(SS), ART& 100(HUM), DRMA& 101(HUM), HIST& 126(HUM)/127(SS), HIST& 128(Root/SS). WSU requires a Root course as one of the Social Science(SS) and Humanities(HUM)

Sixth Quarter

- CS 280: Advanced Data Structures (5 credits)
- ENGL 235: Technical Writing (5 credits)
- Choose one for elective credit:
  - PHYS& 223 or CHEM& 161 / BIO& 160, BIO& 221/222/223, BIO& 241,, ERSI 104/105/109, ENVS 215, GEOL& 101/208, OCEA& 101, GEOL 105/118. Must have two categories of Natural Sciences Distribution. Confer with an advisor and the transfer university for acceptable courses.

Seventh Quarter

- ENGR 205: Design of Logic Circuits (5 credits)
- MATH& 254: Calculus IV (5 credits)
- Choose one for elective credit:
  - ECON& 201/202(SS), SOC& 101(SS), POLS& 101/202(SS), PSYC& 100/200(SS), ART& 100(HUM), DRMA& 101(HUM), HIST& 126(HUM)/127(SS), HIST& 128(Root/SS). Must include 5 credits each Social Science(SS) and Humanities(HUM) OR IT 249: Linux Operating Systems (Prerequisite) (5 credits)

Eighth Quarter

- ENGR 206: Microprocessor Systems (5 credits)
- Choose one for elective credit:
  - PHYS& 223 or CHEM& 161 / BIO& 160, BIO& 221/222/223, BIO& 241,, ERSI 104/105/109, ENVS 215, GEOL& 101/208, OCEA& 101, GEOL 105/118. Must have two categories of Natural Sciences Distribution. Confer with an advisor and the transfer university for acceptable courses.
- IT 249: Linux Operating Systems (5 credits)

Apply for Graduation (lowercolumbia.edu/graduation)

Ninth Quarter

- CS 285: Programming Tools (5 credits)
- Choose one for elective credit:
  - ECON& 201/202(SS), SOC& 101(SS), POLS& 101/202(SS), PSYC& 100/200(SS), ART& 100(HUM), DRMA& 101(HUM), HIST& 126(HUM)/127(SS), HIST& 128(Root/SS). Must include 5 credits each Social Science(SS) and Humanities(HUM)

Students completing this program should acquire the following skills and abilities:

- Apply mathematics to the solution of problems in computer science.
- Apply physics to the solution of problems in computer science.
- Discover, develop, and utilize algorithms suitable for the design of computer programs.
- Design and implement computer programs using various programming languages.

Revised June 2023 (Effective Summer 2023)

Notes:

WSUV requires: Must complete 5 of these 6 UCORE designations(by end of BS): ARTS, DIVR, HUM, SSCI, EQJS. Must complete one ROOT course. Courses listed under the Humanities(HUM)/Social Science(SS) for this degree transfer to WSU as one of these categories.

It is essential to work closely with your advisor due to course sequencing.

Program planning is based on information available at the time of preparation. It is the student's responsibility to meet with their LCC advisor and for checking specific major requirements of baccalaureate institutions in the year prior to transferring. Consult the LCC catalog for LCC graduation requirements.

Detailed Class Sequence

1. College Success

COLL 101: College Success 101 (2 credits)

Checked for Accessibility: CR, ECR, 08/06/2025, Adobe Accessibility Checker

2. Pre-Major Requirement

CS 170: Computer Programming (5 credits)

- *Prerequisite/s: MATH 088 or MATH 097 with grade C or better and knowledge of Windows is required; or instructor permission.*

3. Communications Requirement

ENGL& 101: English Comp I (5 credits)

- *Prerequisite/s: College level reading and writing skills or completion of ENGL 099 or TECH 105 with grade C or better*

4. Math Requirement

MATH& 151: Calculus I (5 credits)

- *Prerequisite/s: MATH& 142 with grade C or better*

5. Pre-Major Requirement

CS 275: Object Oriented Programming (5 credits)

- *Prerequisite/s: CS 170 with grade C or better, or instructor permission*

6. Math Requirement

MATH& 152: Calculus II (5 credits)

- *Prerequisite/s: MATH& 151 with grade C or better*

7. Pre-Major Requirement

MATH 215: Discrete Structures (5 credits)

- *Prerequisite/s: MATH& 142 with grade C or better*

8. Social Science Requirement

Choose One:

- ECON& 201: Micro Economics (5 credits)
  - *Prerequisite/s: MATH 088 or BUS 104 and ENGL& 101 or BUS 190*
- ECON& 202 Macro Economics (5 Credits)
  - *Prerequisite: ECON& 201 with a grade of C or better*
- SOC& 101 Introduction to Sociology (5 Credits)
- POLS& 101 Introduction to Political Science (5 Credits)

Checked for Accessibility: CR, ECR, 08/06/2025, Adobe Accessibility Checker

- POLS& 202 US Government (5 Credits)
  - *Prerequisite: ENGL&101*
- PSYC& 100 General Psychology (5 Credits)
- PSYC& 200 Abnormal Psychology (5 Credits)
  - *Prerequisite: PSYC& 100*
- HIST& 127 World Civilizations II (5 Credits)

9. Pre-Major Requirement

MATH& 153: Calculus III (5 credits)

- *Prerequisite/s: MATH& 152 with grade C or better*

10. Pre-Major Requirement

MATH 220: Linear Algebra (5 credits)

- *Prerequisite/s: MATH& 152 with grade C or better*

11. Pre-Major Requirement

CS 270: Data Structures I (5 credits)

- *Prerequisite/s: MATH 098 and CS 170, both with grade C or better, or instructor permission*

12. Pre-Major Requirement

PHYS& 221: Engineering Physics I w/ Lab (5 credits)

- *Prerequisite/s: Completion of or concurrent enrollment in MATH& 151 or instructor permission*

13. Social Sciences / Diversity Requirement

HIST& 128: Western Civ III (5 credits)

- *Fulfills [ROOT] requirement at WSU*

14. Pre-Major Requirement

PHYS& 222: Engineering Physics II w/ Lab (5 credits)

- *Prerequisites: PHYS& 221, MATH& 152 or instructor permission.*

15. Humanities Requirement

Choose one Humanities course from the distribution list from a discipline other than HIST or ECON (5 credits)

16. Pre-Major Requirement

CS 280 Advanced Data Structures (5 credits)

- *Prerequisite/s: CS 270 and MATH& 141, both with grade C or better, or instructor permission*

17. Pre-Major Requirement

PHYS& 223: Engineering Physics III w/ Lab (5 credits)

- *Prerequisite/s: PHYS& 222 or instructor permission*

18. Recommended Elective

ENGL& 235: Technical Writing (5 credits)

- *Prerequisite/s: ENGL& 101 with grade C or better*
- *Fulfills [WRTG] requirement at WSU*

19. Pre-Major Requirement

ENGR 205: Design of Logic Circuits (5 credits)

- *Prerequisite/s: MATH& 141*

20. Recommended Elective

IT 249 Linux Operating Systems (5 credits)

- *Required to transfer to WSUV at junior level*

21. Pre-Major Requirement

MATH& 254: Calculus IV (5 credits)

- *Prerequisite/s: MATH& 153 with grade C or better*

22. Pre-Major Requirement

ENGR 206: Microprocessor Systems (5 credits)

- *Prerequisite/s: CS 270, ENGR 205*

23. Lab Based Science Course Requirement

Choose one:

- PHYS& 223 Engr Physics III w/Lab (5 Credits)
- BIOL& 160: General Biology w/ Lab (5 credits)

Checked for Accessibility: CR, ECR, 08/06/2025, Adobe Accessibility Checker

- BIOL& 221 Majors Ecology/Evolution: w/Lab (5 Credits)
- BIOL& 222 Majors Cell/Molecular: w/Lab (5 Credits)
- BIOL& 223 Majors Organismal Phys: w/Lab (5 Credits)
- BIOL& 241 Human A & P 1 (5 Credits)
- CHEM& 161: General Chem w/ Lab 1 (5 credits)
- ENVS 215: Environmental Issues & Applications w/ Lab (5 credits)
- ERSI 104: Introduction to Earth Science (5 credits)
- ERSI 105: Earth Systems w/ Lab (5 credits)
- ERSI 109: Energy and Our Planet: Earth Sciences (5 credits)
- GEOL& 101 Intro Physical Geology (5 Credits)
- GEOL& 105 Geology: Earth Revealed (5 Credits)
- GEOL& 118 Historical Geology (5 Credits)
- GEOL& 208 Geology of Pacific Northwest (5 Credits)
- Other lab-based science courses may also work. Consult with an LCC advisor and the transfer university.

24. Pre-Major Requirement

CS 285: Programming Tools (5 credits)

- *Prerequisite/s: CS 270 with grade C or better, or instructor permission*

25. Recommended Elective

Confer with advisor or transfer university for acceptable courses.