Computer Science - AST

2021-22

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

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 courses in areas of interest to deepen knowledge and understanding.

See also:

- Degree Requirements for Science, Technology, Engineering and Math programs
- Course descriptions in LCC Catalog
- Distribution lists in LCC Catalog

Please note that many course sequences only begin in fall quarter. Please check with your program advisor for more information.

Please review both the "By Quarter Overview" and "Detailed Class Sequence" tabs below.

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

Third Quarter

- Choose one:
  - ECON& 201: Micro Economics (5 credits)
  - ECON& 202: Macro Economics (5 credits)
  - HIST& 128: World Civilizations III (5 credits)
- MATH& 153: Calculus III (5 credits)
- MATH 220: Linear Algebra (5 credits)

Fourth Quarter

- CS 270: Data Structures I (5 credits)
- PHYS& 221: Engineering Physics I w/ Lab (5 credits)
- Choose one:
  - ART& 100: Art Appreciation (5 credits)
  - CMST 250: Intercultural Communication (5 credits)
  - HIST& 126: World Civilization I (5 credits)

Fifth Quarter

- PHYS& 222: Engineering Physics II w/ Lab (5 credits)
- Choose one:
  - ANTH& 100: Survey of Anthropology (5 credits)
  - ANTH& 206: Cultural Anthropology (5 credits)
  - HIST& 128: Western Civ III (5 credits)
  - HIST& 215: Women in US History (5 credits)
  - SOC& 101: Intro to Sociology (5 credits)
- Elective (5 credits)

Apply for Graduation

Sixth Quarter

- Choose one:
  - BIOL& 100: Survey of Biology (5 credits)
  - BIOL& 160: General Biology w/ Lab (5 credits)
  - ENVS 215: Environmental Issues & Applications (5 credits)
  - ERSI 105: Earth Systems (5 credits)
- CS 280: Advanced Data Structures (5 credits)
- PHYS& 223: Engineering Physics III w/ Lab (5 credits)

Detailed Class Sequence

1. College Success

COLL 101: College Success 101 (2 credits)

2. Pre-Major Requirement

CS 170: Computer Programming (5 credits)

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

3. Communications Requirement

ENGL& 101: English Comp I (5 credits)

- *Prerequisites: College level reading and writing skills or completion of ENGL 099 or TECH 105 with a grade of C or better.*

4. Math Requirement

MATH& 151: Calculus I (5 credits)

- *Prerequisites: MATH& 142 with a grade of C or better.*

5. Pre-Major Requirement

CS 275: Object Oriented Programming (5 credits)

- *Prerequisite: CS 170 with a grade of C or better, or instructor permission.*

6. Math Requirement

MATH& 152: Calculus II (5 credits)

- *Prerequisite: MATH& 151 with a grade of C or better.*

7. Pre-Major Requirement

MATH 215: Discrete Structures (5 credits)

- *Prerequisite: MATH& 142 with a grade of C or better.*

8. Social Sciences Requirement

Choose one of these recommended courses:

- ECON& 201: Micro Economics (5 credits)
  - *Prerequisites: MATH 088 or TECH 088 or BUS 104 and ENGL& 101 or BUS 190.*
- ECON& 202: Macro Economics (5 credits)
  - *Prerequisite: ECON& 201 or instructor permission.*
- HIST& 128: Western Civ III (5 credits)
  - *Fulfills [ROOT] requirement at WSU*

9. Pre-Major Requirement

MATH& 153: Calculus III (5 credits)

- *Prerequisite: MATH& 152 with a grade of C or better.*

10. Pre-Major Requirement

MATH 220: Linear Algebra (5 credits)

- *Prerequisite: MATH& 152 with a grade of C or better.*

11. Pre-Major Requirement

CS 270: Data Structures I (5 credits)

- *Prerequisite: MATH 098 and CS 170, both with a grade of C or better, or instructor permission.*

12. Pre-Major Requirement

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

- *Prerequisites: Completion of or concurrent enrollment in MATH& 151 or instructor permission.*

13. Humanities / Diversity Requirement

Choose one of these recommended courses:

- ART& 100: Art Appreciation (5 credits)
- CMST 250: Intercultural Communication (5 credits)
  - *Fulfills [DIVR] requirement at WSU*
- HIST& 126: World Civilization I (5 credits)
  - *Fulfills [DIVR] 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. Social Science / Diversity Requirement

Choose one of these recommended courses:

- ANTH& 100: Survey of Anthropology (5 credits)
  - *Fulfills [DIVR] requirement at WSU*
- ANTH& 206: Cultural Anthropology (5 credits)
  - *Fulfills [DIVR] requirement at WSU*
- HIST& 128: Western Civ III (5 credits)
  - *Fulfills [ROOT] requirement at WSU*
- HIST& 215: Women in US History (5 credits)
  - *Fulfills [DIVR] requirement at WSU*
- SOC& 101: Intro to Sociology (5 credits)

16. Elective

Choose any elective (5 credits)

17. Lab Based Science Course Requirement

Choose one of these recommended courses:

- BIOL& 100: Survey of Biology (5 credits)
- BIOL& 160: General Biology w/ Lab (5 credits)
- ENVS 215: Environmental Issues & Applications (5 credits)
  - *Prerequisites: ENGL& 101 or consent of instructor.*
- ERSI 105: Earth Systems (5 credits)

18. Pre-Major Requirement

CS 280 Advanced Data Structures (5 credits)

- *Prerequisites: CS 270 and MATH& 141, both with a grade of C or better, or instructor's permission.*

19. Pre-Major Requirement

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

- *Prerequisites: PHYS& 222 or instructor permission.*

Program Maps for Science, Technology, Engineering and Math (STEM)

- Bioengineering and Chemical Pre-Engineering - AS-T (Bioengineering Option)
- Bioengineering and Chemical Pre-Engineering - AS-T (Chemical Engineering Option)
- Biological Sciences - AS-T
- Biology - DTA/MRP
- Chemistry - AS-T
- Computer and Electrical Pre-Engineering - AS-T (2 Year Option)
- Computer and Electrical Pre-Engineering - AS-T (3 Year Option)
- Computer Science - AST
- Computer Science - AST (WSUV)
- Earth Sciences - AA-DTA
- Earth Sciences - AS-T
- Environmental Science - AS-T
- Mechanical, Civil, Aeronautical, Industrial, Materials Science Engineering (2 Year Option)
- Mechanical, Civil, Aeronautical, Industrial, Materials Science Engineering (3 Year Option)
- Mechanical Engineering Technology AS-T
- Physics - AS-T
- Physics - AS-T (Math Transfer Option)