Associate of Science Degree in Computer Science (9110)

Associate of Science Degree

The Associate of Science in Computer Science degree is part of Ohio's Guaranteed Transfer Pathways (OGTP) program. The OGTP provides a clear path to associate degree completion and then to bachelor's degree completion in a related major. By following an OGTP, you can ensure that you are taking coursework that will not only transfer but apply to your desired degree at your transfer institution.
  Majoring in Computer Science involves design and innovation developed from computer principles. It focuses on the theoretical foundations of computing, algorithms, and programming techniques, as applied to operating systems, artificial intelligence, informatics, and other emerging areas. Computer scientists should be prepared to work in a broad range of positions involving tasks from theoretical work to software development, Computer science programs typically require a significant math background.

Course	Title	Credit Hours
First Semester		
ENGL 1110 or ENGL 1111	English Composition I (A) [1] or English Composition I (B)	3
FYEX 1000	First Year Experience	1
ITCS 1010	Programming Logic 🎓	3
ITIS 1007	Principles of Information Technology and Computer Science	3
Select course(s) from the Ohio Transfer 36 Arts and Humanities Electives List [3]		3
Select course(s) from the Ohio Transfer 36 Social & Behavioral Sciences Electives List [4]		3
	Credit Hours	**16**
Second Semester		
ITCS 1870	Python Programming I 🎓	3
MATH 2500	Calculus and Analytical Geometry I [2]	5
PHIL 2600	Logic	3
ENGL 1120	English Composition II	3
	Credit Hours	**14**
Third Semester		
CHEM 1500 or PHYS 2410	General Chemistry I or Science and Engineering Physics I	5
ITCS 2870	Data Structures 🎓	4
ITCS 2873	Python Programming II	3
MATH 2600	Calculus and Analytical Geometry II	5
	Credit Hours	**17**
Fourth Semester		
ITCS 2012	Discrete Structures 🎓	3
ITCS 2875	Computer Architecture and Organization 🎓	3
Select course(s) from the Ohio Transfer 36 Arts and Humanities Electives List [3]		3
Select course(s) from the Ohio Transfer 36 Social & Behavioral Sciences Electives List [4]		3
Select course(s) from the Ohio Transfer 36 Natural Science Electives List (with Lab) [5]		4
	Credit Hours	**16**
	Total Credit Hours	**63**

[1] English course selection is based on placement test results (ENGL 1111 English Composition I (B) is 4 credits, only 3 credits apply to the degree).

[2] Place into MATH 2500 Calculus and Analytical Geometry I or complete MATH 1700 Trigonometry

[3] Ohio Transfer 36 Arts and Humanities Electives List (https://catalog.lakelandcc.edu/degree-certificate-programs/gnst/9099/#arts-electives)

[4] Ohio Transfer 36 Social & Behavioral Sciences Electives List (https://catalog.lakelandcc.edu/degree-certificate-programs/gnst/9099/#socy-electives)
Students should discuss the choice of science courses with their advisor.

5   Ohio Transfer 36 Natural Science Electives List. (https://catalog.lakelandcc.edu/degree-certificate-programs/gnst/9099/#nats-electives)

Suggested Natural Science elective: BIOL 1510 Principles of Biology I ; CHEM 1500 General Chemistry I ; PHYS 2420 Science and Engineering Physics II

Students are encouraged to take:

Course	Title	Credit Hours
ITCS/CPET 1120	C Programming for Technicians	3
ITCS 1820	Java Programming I	3
ITCS 2080	Fundamentals of Software Engineering	3
ITDB 1401	SQL Programming and Database Design	3
ITON 1205	Network+ and Networking Essentials	2

☛   This course is designated as a technical course in the program. Students must earn a "C" grade or higher in the course to fulfill the college's graduation requirements policy.