

The Computer Science major at Valparaiso University employs the methodologies of mathematics (logic), science (observation), and engineering (design). At its core is the study of algorithms: the precise sequence of instructions used to solve problems. Valpo's Computer Science curriculum includes extensive exploration of all of these principles, preparing undergraduates for the future of technology regardless of what new languages, operating systems, and applications emerge.



Not only do Valpo undergraduates in Computer Science cultivate the skills necessary for a career in the field, but they also share in Valpo's rich tradition of a liberal arts foundation. Graduates leave Valpo with excellent quantitative and qualitative analytical skills, as well as strong interpersonal, oral, and written communication skills-resulting in graduates who are truly well-rounded.

The Computer Science major, for either the Bachelor of Arts or Bachelor of Science degree, consists of the following courses:

MATH 131 Calculus I MATH 168 Discrete Structures I MATH 240
Statistical Analysis MATH 269 Discrete Structures II CS 157 Algorithms
and Programming CS 158 Algorithms and Abstract Data Types CS 246
Computer Architecture and Programming CS 257 Data Structures
and Programming Languages CS 332 Databases and Artificial Intelligence
CS 347 Operating Systems and Networking CS 358 Software
Design and Development (required for BS only) CS 372 Computability and
Computational Complexity CS 493 Seminar on Professional Practices Plus
5 elective credits numbered above 290.