Computer Science

Computer Science 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 curriculum emphasizes software design while also providing a liberal arts background, preparing students for top employment and graduate school placement. Research, co-op and internship opportunities are abundant. All classes make use of laboratory settings, complete with access to a variety of Windows, Linux, and UNIX networks and a campus wireless network.

scholarships and awards

In addition to the various scholarships and awards offered to freshmen by the University, the Department of Mathematics and Computer Science offers the Louis Foster Scholarship to junior and senior Computer Science majors. If a scholarship is granted, the money is added to the student's promised financial aid package. For information on scholarships and awards, visit valpo.edu/financialaid/.

Valparaiso University

exceptional faculty

Computer Science classes are taught by full-time faculty, all of whom hold terminal degrees. Each member brings diverse interests and areas of expertise, including computer simulation, software design, artificial intelligence, intelligent tutoring systems, educational dialogue, natural language processing, discrete mathematics, and theories of computation. Each of the faculty members are involved with one (if not more) of the numerous professional organizations in the field of Computer Science, keeping them abreast of current issues facing the nation's Computer Science education.

extracurricular activities

Undergraduate Research Opportunities—Computer Science students enjoy multiple opportunities to join the faculty in exciting research projects. Current student research involves applying artificial intelligence techniques to web and board games. One such project involved students and faculty at Valpo assisting in the process of designing an instrument for NASA that reduced the number of amplifiers needed while retaining information from the X-ray portion of the spectrum.

learn more — in person

See campus, meet a professor, and sit in on a class: Call Valpo's Office of Undergraduate Admission at 888.GO.VALPO or 219.464.5011 to schedule a personalized visit. Find out more information on visits at valpo.edu/admission/visit, and learn about Valpo students' personal stories and experiences at valpo.edu/whatsyourpart.

beyond-the-classroom opportunities

Information Technology — Numerous employment opportunities are available through Valparaiso University's IT department. It is common for students to assume sophisticated responsibilities by their junior and senior years. Students have the opportunity to continue their studies at Valparaiso University after graduation in the Master's level Information Technology Management program. Requiring approximately one additional year of study, this degree prepares students for leadership roles in the expanding IT field.

Internships — Pre-professional experiences are encouraged through cooperative education internship placements at companies such as Arthur Anderson, Texas Instruments, TDS Corp., IBM, and Unisys.

Study Abroad — The intentionally flexible curriculum affords students the opportunity to participate in any of Valpo's semester-long study abroad programs and still graduate in four years.