

Department of Mathematics & Computer Science - Valparaiso University
COLLEGE EXPERIENCES FOR TALENTED HIGH SCHOOL STUDENTS

Talented high school students frequently look for opportunities to extend and to enrich their learning experiences. The Department of Mathematics & Computer Science has responded to this need by offering two courses developed specifically for high school students.

Each course earns three college credits which can be used towards graduation requirements at Valparaiso University or at other colleges and universities. They are specifically designed to complement the high school experiences of these students rather than to duplicate them or simply "move to the next level".



The [Computer Science course](#) is offered during the fall semester and focuses on introducing students to basic programming ideas using the languages ALICE and PYTHON. Nearly half of the course consists of presentations by faculty who use computing tools for GIS purposes, for weather forecasting, graphics, and modeling.

The [Mathematics course](#) is offered during the spring semester and focuses on mathematical modeling. The course consists of a series of lectures on modern mathematical topics including linear programming, game theory, dynamical systems, non-Euclidean geometry, graph theory, and number theory.

Each course costs \$600 and enrollment is not automatic. Students need to apply for the courses, through the [Young Scholars Academy](#) at Valparaiso University.
