

Physical Sciences and Mathematics

If you want to work as a scientist today, you have to have a command of several disciplines, not just one. A chemist needs to know physics, and a mathematician needs to know about computers. Evergreen's integrated science curriculum is ideally suited to meet this modern need.

Interdisciplinary Studies

Interdisciplinary studies combine ordinarily separate disciplines into an integrated program, just as they are integrated in real scientific problem solving. Working with a team of faculty, you learn how theories in chemistry, biology, physics, math, computer science and other sciences relate to each other. Philosophy, ethics, the history of science, and even literature are frequently tied into a schedule of lectures, labs, seminars and workshops. Ordinarily, you take just one comprehensive, interdisciplinary program each quarter.

These richly integrated programs provide you with the basic and intermediate levels of study. Advanced studies can be pursued through more specialized programs and courses, or by designing your own independent study, done through what we call an "Individual Contract" with a faculty sponsor.

Mathematics

A variety of programs, courses and individual contracts provide you with the opportunity to do intermediate and advanced work in mathematics. They are designed to serve students who are preparing for careers and/or graduate study in mathematics as well as for students who want a solid background in mathematics for work in related fields.

You are encouraged to combine your study of mathematics with that of a related discipline, such as computer science, physics or philosophy. The programs listed below provide you with one way of doing this. The courses and individual contracts enable both full-time and part-time students to do more specialized and advanced work.

A recommended *pathway* through the **Mathematics** curriculum is as follows:

First Year

Any *Core Program* in the arts, social sciences and humanities.

Second Year

"Foundations of Natural Science" and "Matter and Motion," are full-time, integrated programs in mathematics, physics and chemistry. Placement depends on prior experience.

Third and Fourth Year

"Computability and Cognition," a full-time integrated program in psychology, computer science and philosophy. "Data to Information" and "Physical Systems." Courses are offered in advanced calculus, differential equations, abstract algebra, linear algebra, and numerical analysis. **Individual Contracts**, independent study programs may be undertaken with faculty sponsorship.

Physical Sciences

Students interested in professional work or study in chemistry or physics may gain a strong foundation in the concepts and methods of physics and chemistry along with opportunities to understand the applications and impacts of these technical subjects.

The suggested sequence of study in **Physical Sciences** is as follows:

First Year

Any *Core Program* in the arts, social sciences and humanities.

Second Year

"Matter and Motion" or "Foundations of Natural Science"

Third or Fourth Year

"Physical Systems"
"Chemical Systems and Environmental Analysis"
"Advanced Chemistry: Dynamic Systems and Structures"

Facilities/Equipment

Facilities and equipment are important. Access, though, is even more vital. We have focused our **Science** programs on undergraduates, emphasizing computer-assisted and computer-controlled equipment. You will have access to graduate-level research facilities, including:

Wide range of spectroscopy equipment, including ultraviolet, visible and infrared instruments

Environmental chemistry lab with gas chromatography and atomic absorption units

Scanning electron microscope

Fourier transform nuclear magnetic resonance spectrometer

Spin resonance equipment

Gas chromatograph—mass spectrometer

Liquid scintillation center

Holography lab

Advanced organic analysis lab

Laboratory computer electronics/microprocessor facility

Internships

Internships are our way of letting you experience the challenge of the practicing scientist. Our Cooperative Education Office guides you in finding an appropriate placement, and an Evergreen faculty member serves as sponsor.

Advising Services

Our Advising Services enable you to make intelligent decisions about your education at each step of the way, rather than follow standardized requirements. In other words, you are able to work with a faculty or staff advisor in designing a coherent path through our Core, intermediate and advanced offerings. In this way you can combine programs, projects and internships as you work toward your degree. If you have chosen a field of study, if you are undecided, or if you change your mind later, our advisors can assist you in making appropriate plans.

The Evergreen State College
Olympia, Washington

The Learning Environment

Evergreen challenges you to think independently and creatively. You will find that your teachers encourage you to develop your potential and your interests as a student by working productively with others rather than competing with them. Evergreen faculty provide written evaluations rather than grades to reflect your achievements.

Life After Evergreen

Overall, Evergreen graduates enjoy unusual success. In our most recent placement survey, 94% of our graduates who responded reported they are employed, in graduate school or in other placements of their choice. Some of our science graduates are pursuing further study at the University of Washington, U.C. Santa Cruz, and Stanford. Sample employers include Boeing, Tektronix and Lockheed.

Evergreen is a public, liberal arts college of 3000 students, offering Bachelor's and Master's degrees. Tuition is \$537 per quarter for Washington state residents and \$1883 per quarter for non-residents.

For further information about Evergreen and for help in planning your Science studies please contact:

Admissions: (206) 866-6824
Academic Advising: (206) 866-6000, ext. 6312

or write:

Admissions Office
The Evergreen State College
Olympia, WA 98505

Prospective students who wish to request a catalog should call the Admissions Office at (206) 866-6824. After working hours (5 p.m. P.S.T.), an answering machine will record your request.

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