



## Viticulture & Enology Degree Programs

### Undergraduate Degrees

#### **Bachelor of Science Degree (BS)**

The Department of Horticulture at Oregon State University offers a BS. in Horticulture with a Viticulture & Enology option. Similarly, the Department of Food Science & Technology offers a BS in Food Science with an option in Enology & Viticulture. Students who take either of these programs will be prepared to begin a professional career in the winegrape industry. Both provide a traditional four-year undergraduate program where students are involved in course work that covers various disciplines important to the career field, depending on which major and degree option is chosen. The two options are interdisciplinary and involve overlapping coursework in areas of horticulture and food science. Please see the information on the [Horticulture Department](#) and [Food Science and Technology Department](#) websites for course lists. As part of both programs, students participate in internships that allow them hands-on experience in commercial vineyards and wineries.

#### **Post-Baccalaureate Program (Post-Bacc)**

Post-baccalaureate students are those students that enter the undergraduate program with a previously earned BS or BA degree. Students typically complete the degree requirements in 1 to 3 years, depending on the prior degree. Students with prior science-related degrees are able to graduate in about 1.5 to 2 years.

To find out more about applying to the BS or [Post-Bacc Programs](#), please see [Oregon State University Admissions Office](#). If you have questions about the BS and Post-Bacc options, contact the following academic advisors based on the curriculum you wish to pursue:

- Viticulture & Enology: [Anne Gearhart](#), academic advisor, Department of Horticulture
- Enology & Viticulture: [Glen Li](#), academic advisor, Department of Food Science & Technology

### Graduate Degrees

The Viticulture and Enology Graduate Degree Programs are housed within various departments at Oregon State University based on the home of the major professor under whom students will study. The most common department homes for major professors include 1) Horticulture (for viticulture-focused students who work on grapevine physiology or entomology), 1) Food Science & Technology (for enology-focused students), and 3) Botany & Plant Pathology (for viticulture-focused students who will work on grapevine diseases). All departments offer students the opportunity to complete a graduate degree in one of three levels, including the 1) Masters of Science (M.S.), 2) Doctor of Philosophy (Ph.D.), or 3) the non-thesis based Masters of Arts in Interdisciplinary Sciences (MAIS).

#### **MS or PhD Programs**

The MS and Ph.D. degree programs include a curriculum of advanced-level coursework in areas related to scientific research defined by the student's research thesis and generally include statistics, biochemistry, plant physiology, viticulture, botany, plant pathology, soil science, enology, food chemistry, chemistry, and microbiology. The course work is tailored to the needs of the student to fulfill their specific research project. A major component of the MS and Ph.D. program is the thesis in which the student works with the graduate advisor to develop and conduct a scientific research study that will be written into a thesis with the expectation of publishing in peer-refereed journals upon completion of

the work. A student's program is focused in one subject area but may be inter-disciplinary in nature. For example, viticulture projects may be linked to enology, entomology, plant pathology, or soil science, while enology projects may be linked to biochemistry, chemistry, microbiology, sensory, or viticulture. The time to complete the degree programs vary by discipline. For viticulture, two growing seasons are required for the thesis and a student will take 2.5 to 3 years to complete a MS program. A minimum of three growing seasons and 4 to 5 years are needed for a student to complete a Ph.D. program. For enology students, a MS program is typically 2 full years and a Ph.D. may be a minimum of three years depending on the project and the status of the incoming student. Furthermore, Ph.D. projects require more independent and in-depth experimental work than an MS project, so students entering a Ph.D. program typically already have a MS degree. In some cases, students may be accepted into Ph.D. programs if they have a BS degree with demonstration of an exceptional academic record, prior research experience, proof of publication and skill in technical writing, and are highly motivated in their work ethic and interest for the discipline area.

Since MS and Ph.D. students are conducting research, projects are typically funded through research grants obtained by the faculty advisor. Therefore, only a few students are admitted to the program annually based on grant funding availability. Admission to the graduate program is highly competitive, and only the best students are selected. To meet the minimum requirements for a **graduate degree** focusing on **viticulture or enology**, students interested in applying must have the following:

1. **BS or MS degree** in one of the following areas based on area of interest. For viticulture: plant science, horticulture, agronomy, biology, botany, biochemistry, or related plant science/agricultural field of study. For enology: food science, microbiology, biochemistry, biology, sensory, chemistry or other relevant field of science. If you have a BS or BA in a field outside these areas but still wish to get an education in viticulture and/or enology, you will need to consider the Post-Bacc programs described previously.
2. **Good academic record** – A strong grade point average (GPA) is required for admissions. The standard GPA requirement for admissions into the Graduate School is 3.0, but the individual faculty advisor may have his/her own requirements for new graduate students. Generally, a GPA of 3.5 or above is highly desirable. We do not accept students with a GPA lower than the Graduate School minimum.
3. **A desire to conduct research** – Graduate programs are designed to train students to become researchers and require focus in this area of emphasis with the expectation to do lab work/field data collection, and publish research results. The goal is to provide you with training to become a good scientist and technical writer. The goal is not to provide work force training for entry into the wine grape industry.

### **Professional Masters (MAIS)**

If you fulfill the requirements of admissions in 1 and 2 above but are not interested in conducting research required for the MS and PhD degrees, you should consider the [Master of Arts in Interdisciplinary Studies \(MAIS\)](#). This flexible, student-tailored degree program focuses on advanced coursework in three [program areas](#) of your choice. The degree can be thesis or non-thesis based. The difference is that MAIS thesis is much smaller in scope and doesn't require the same expectations as the MS. Please read more about this program online and contact faculty (see list below) about your interest

in this degree option before applying. The estimated time required to complete this program is a minimum of 2 years.

**Graduate Admissions Process**

Be sure to check out the [OSU Graduate School](#) for more information. The requirements for admissions are clearly outlined for potential students. Please see the following departmental websites for more information about the different graduate degree programs:

- [Department of Horticulture](#)
- [Department of Food Science & Technology](#)
- [Department of Botany & Plant Pathology](#)
- [Department of Applied Economics](#)

Admissions by the OSU Graduate School requires that you have a graduate advisor. Therefore, it is critical to start by contacting faculty members with whom you wish to work prior to applying. Outlined below are the advising professors with varying expertise within viticulture and enology or related fields of study. If you believe you meet the criteria for graduate studies, contact the individual faculty member to discuss your interest in graduate studies that may be specific to the discipline areas outlined. When contacting potential graduate advisors, be sure to supply them with a resume that reports your educational background (institution, major/minor, and GPA), relevant course work taken, previous work history, and a cover letter which includes a statement of intent (why you want to pursue graduate studies and your career goals).

**Faculty Mentors for Graduate Research Studies**

The list below provides the faculty members, their areas of expertise and a link to their faculty website/profile. Be sure to investigate the programs before contacting the faculty member directly.

***Viticulture Science Research***

- [Dr. Alexander Levin](#), viticulture and vine physiology (southern Oregon)
- [Dr. Patty Skinkis](#), viticulture and vine physiology (main campus)
- [Dr. Laurent Deluc](#), grape metabolomics/genomics (main campus)
- [Dr. Paul Schreiner](#), grapevine nutrition, root physiology and mycorrhizal fungi (main campus)
- [Dr. Vaughn Walton](#), horticulture entomology (main campus)
- [Dr. Achala KC](#), tree fruit and grape pathology (southern Oregon)
- [Dr. Jay Pscheidt](#), plant pathology (main campus)
- [Dr. Walt Mahaffee](#), grape plant pathology, foliar fungal diseases (main campus)

***Enology/Wine Science Research***

- [Dr. James Osborne](#), enology and wine microbiology (main campus)
- [Dr. Elizabeth Tomasino](#), wine chemistry and sensory science (main campus)
- [Dr. Michael Qian](#), grape and wine flavor/aroma chemistry (main campus)
- [Dr. Christopher Curtin](#), fermentation microbiology (main campus)
- [Dr. Jungmin Lee](#), grape and small fruit phytochemistry (main campus)



## Viticulture & Enology Degree Programs

### ***Wine Business/Economics Research***

While this area of research is not typically within the disciplines of Viticulture and Enology, the Oregon Wine Research Institute has begun partnerships with researchers who have applied their business/economics expertise to research within the Oregon wine industry. If interested in economics/business research, please contact the following faculty members.

- [Dr. James Sterns](#), ag economics of food products (main campus)
- [Dr. Nadia Streletskaya](#), consumer behavior/behavioral economics (main campus)

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