Viticulture & Enology Program Curriculum

CALS Requirements
Refer to http://cals.cornell.edu/academics/upload/CALS-Graduation-Requirements.pdf and DUST.

Viticulture and Enology Major Requirements*
Physical Science Core (35-36 credits):

Biological Sciences (minimum 9 credits)
___BIOG 1140 Foundations of Biology (4)
___Introductory biology course (BIOMG 1350, BIOG 1440, BIOG 1500, BIOEE 1610, BIOEE 1780, or PLHRT 1115)
___BIOMI 2900 General Microbiology (3)

Chemistry (10-11 credits)
___CHEM 1560 Introduction to General Chemistry (4)
___CHEM 1570 Introduction to Organic and Biological Chemistry (3)
___BIOMG 3300 or 3310 Principles of Biochemistry (3-4)

Statistics (4 credits)
___ Introductory statistics course (NTRES 3130/STSCI 2200, STSCI 2100, or STSCI 2150 recommended)

Plant Science (12 credits)
___PLBIO 2410 Introductory Plant Biodiversity and Evolution (3)
___PLSCS 2600 Soil Science (4)
___Choose one:
    PLBIO 2420/2421 Plant Function and Growth, Lectures and Laboratory (5)
    PLBIO 3420/3421 Plant Physiology, Lectures and Laboratory (5)

Viticulture & Enology Core (Minimum 21 credits):
___VIEN 1104 Wines and Vines Lecture (3)
___VIEN 1105 Wines and Vines Lab (2)
___VIEN 2204 Grapes to Wines Lecture (3)
___VIEN 2205 Grapes to Wines Lab (2)
___VIEN 2400 Wines and Grapes: Composition and Analysis (3)
___Choose one:
    VIEN 3440 Viticulture and Vineyard Management (3)
    VIEN 3200 Grape Pest Management (3)
    VIEN 4000 Capstone Project in Viticulture and Enology (1)
    VIEN 4700/4710 Winemaking Theory and Practice II Lecture and Lab (3)**
    VIEN 4970/4990 Capstone Research (Independent Study or Research) (1-3)
    VIEN 4980 Internship Experience (0-3)

* Updated November 2016
Major Electives (Minimum 15 credits):

At least 5 credits of major electives must be VIEN classes.

Electives with Enology Focus:
___VIEN 2310/4310 The Science and Technology of Beer Lecture and Lab (2.5)**
___VIEN 2360/4360 Distillation Principles and Practices Lecture and Lab (2.5)**
___VIEN 2340/4340 Cider Production: Apples and Fermented Juice Lecture and Lab (2.5)**
___BIOMI 2911/2910 General Microbiology Lab (2)/Advanced Microbiology Lab (3)
___FDSC 3940 Applied and Food Microbiology (3)
___FDSC 3950 Food Microbiology Lab (3)
___FDSC 4100 Sensory Evaluation of Food Lecture and Lab (3)
___FDSC 4150 Principles of Food Packaging (3)
___FDSC 4170 Food Chemistry I (3)
___FDSC 4180 Food Chemistry II (3)
___FDSC 4190 Food Chemistry Lab (2)
___FDSC 4220 Functional Foods and Dietary Supplements for Health (2)
___VIEN 4400 Wine and Grape Flavor Chemistry (3)
___HADM 4430 Wine Marketing (3)
___VIEN 4500/4510 Winemaking Theory and Practice I Lecture and Lab (3)**
___VIEN 4600 Wine and Food Fermentations (3)

Electives with Viticulture Focus:
___VIEN 3200 Grape Pest Management (3) (only applicable if not taken as part of VIEN Core)
___VIEN 3440 Viticulture and Vineyard Management (3) (only applicable if not taken as part of VIEN Core)
___PLSCS 3150 Weed Biology and Management (4)
___PLHRT 3600 Climate Change and the Future of Food (3)
___NTRES 3240 Sustainable, Ecologically Based Management of Water Resources (3)
___DSOC 3060 Farmworkers: Contemporary Issues and Their Implications (1)
___PLBRG 2250 Plant Genetics (4)
__Choose one:
  PLSCS 3210 Soil and Crop Management for Sustainability (4)
  PLSCS 4660 Soil Ecology (4)
  __PLHRT 4450 Ecological Orchard Management (3)
__Choose one:
  PLHRT 4551 Principles of Nutrition and Nutrient Management in Crops and Landscape Plants (3)
  PLSCS 4720 Nutrient Management in Agro-Ecosystems (4)

*All major requirements must be taken for a letter grade, except when not an option. All required VIEN and major elective courses must be completed with a C- or better.

**Both lecture and laboratory section must be taken for major elective credit. Students taking only the lecture will not receive credit for the course towards completion of the major.
**Suggested Electives**

**Business Management**
- AEM 1200* Introduction to Business Management
- AEM 1230* Foundations of Entrepreneurship and Business
- AEM 2050 Introduction to Agricultural and Development Finance
- AEM 2210* Financial Accounting
- AEM 2400* Marketing
- AEM 3020* Farm Business Management
- AEM 3440 Consumer Behavior
- AEM 3249* Entrepreneurial Marketing and Strategy
- ILRHR 2600 Human Resource Management
- ILRHR 3670 Employee Training and Development
- ILRHR 4600 International Human Resource Management
- NBA 5150 Leadership Theory and Practice
- NCC 5540* Managing and Leading in Organizations
- BEE 3299 Sustainable Development
- HADM 4300 Introduction to Wines

**Agricultural and Plant Sciences**
- PLSCS 1900 Sustainable Agriculture: Food, Farming, and the Future
- PLSCS 2940 Introduction to Agricultural Machinery
- PLSCS 3150 Weed Biology and Management
- PLHRT 4450 Ecological Orchard Management
- PLHRT 4420 Berry Crops: Culture and Management
- BIOEE 3690 Chemical Ecology
- PLSCS 3210 Soil Management for Sustainability
- PLSCS 4130 Physiology and Ecology of Yield
- PLSCS 4200 Geographic Information Systems
- PLSCS 4440 Integrated Pest Management
- PLSCS 4660 Soil Ecology

* Course is applicable to the Dyson School Business Minor for Life Sciences Majors. For more information, visit [http://dyson.cornell.edu/undergraduate/minors/life-sciences](http://dyson.cornell.edu/undergraduate/minors/life-sciences).