

Required Courses**Required Discipline Courses**

BUSN 1166	Business Communications	3 cr
COMP 1120	Intro to Computer Applications	3 cr
MATH 1506	Beginning College Algebra	4 cr
VITI 1105	Molecular Principles of Grape and Wine..	4 cr
VITI 1146*	Introduction to Enology	3 cr
VITI 1148*	Winery Sanitation	3 cr
VITI 1160*	Winery Equipment Operation	2 cr
VITI 1110	Introduction to Wine Microorganisms	3 cr
VITI 1246*	Intermediate Enology – Harvest/Crush	2 cr
VITI 1247*	Intermediate Enology – Post Harvest	2 cr
VITI 1257*	Fall Wine Production Internship	3 cr
VITI 1259*	Cellar Operations Technology.....	2 cr
VITI 1266*	Sensory Evaluation	3 cr
VITI 1268*	Wine and Must Analysis	3 cr

Students must choose a minimum of two (2) credits from the following courses:

VITI 1111	Introduction to Viticulture and Vineyard Establishment	3 cr
VITI 1147*	Introduction to Fruit Wine Production	2 cr
VITI 1211	Integrated Pest Management.....	2 cr
VITI 1293	Soils for Viticulture	3 cr

Required MnTC Courses

***An A.A.S. degree requires a minimum of 15 credits selected from at least three of the ten goal areas of the Minnesota Transfer Curriculum (MnTC).

Students must include the following courses:

BIOL 1431	General Biology I (Goal 3)	5 cr
BIOL 2457*	Microbiology (Goal 3)	4 cr
COMM 1430	Public Speaking (Goals 1,2)	3 cr
ENGL 1422	Practical Writing (Goal 1).....	3 cr
POLS 1435	American Government and Politics (Goals 5,9)	3 cr

*Denotes Prerequisites

GRADUATION REQUIREMENT – 60 CREDITS**Description**

The program provides the knowledge required to produce wines of the highest quality. Students learn the science, agriculture, and business skills necessary to enhance Minnesota's rapidly growing wine industry. Included is a foundation in chemistry and biology along with specific courses related to cultivar selection, soil preparation, cellar maintenance and marketing. The program is specifically designed to include fieldwork and laboratory practicums at local wineries.

Outcomes

By completing this program, students will achieve the following learning outcomes:

- Examine grape samples to ascertain sweetness and acidity of crop, and determine harvest time based off of this information;
- Select yeasts for fermentation and barrels for aging;
- Communicate with vineyard manager regarding crop load, harvest time, and other issues related to crop quality;
- Correct sugar and acid levels of must and wine if necessary;
- Oversee primary fermentation by punching down the grape skin cap, regulating fermentation temperature and the amount of time the skins are in contact with the must, and initiating malolactic fermentation;
- Supervise workers in crushing and pressing processes, or perform those duties themselves;
- Supervise cellar operations during secondary fermentation with tasks such as aging, topping off barrels, and clearing wine of fermentation residue;
- Direct and coordinate blending and bottling of wine, or perform those duties themselves.

Pre-Program Requirements

Some courses may require students to meet College Placement Levels in reading, writing, and/or math. See an advisor for more information.

For insurance purposes, internships may require that students be 18 years old.

Graduation Requirements

In addition to the program requirements, students must meet the following conditions in order to graduate:

- College Cumulative GPA Requirement: cumulative grade point average (GPA) of credits attempted and completed at CLC must be at least 2.0;
- College Technical Core GPA Requirement: cumulative GPA of credits attempted and completed towards the technical core of the diploma or degree must be at least 2.0;
- Residency Requirement: students must complete 25% of their credits at Central Lakes College.

Career & Transfer

Enologists oversee the production of wine. They inspect grapes and evaluate the crops to determine when to harvest and start wine production. They ensure proper crushing methods and techniques. Responsibilities depend on the size of the winery. The enologist is heavily involved in quality control. One may work with a laboratory technician if employed by a larger winery. Another may develop new wines or specialize in a specific wine in a larger winery.

Viticulture and Enology Science and Technology Alliance (VESTA) is a consortium of colleges, including Central Lakes College, Northeast Iowa Community College, Missouri State University, Rend Lake (Ill.) Community College, and Redlands (Okla) Community College. See an advisor for further information about completing a bachelor's degree.

Academic Plan

Semester One (15 credits)

BIOL 1431	General Biology I (Goal 3).....	5 cr
COMP 1120	Intro to Computer Applications	3 cr
MATH 1506	Beginning College Algebra.....	4 cr
VITI 1146*	Introduction to Enology	3 cr

Semester Two (15 credits)

COMM 1430	Public Speaking (Goals 1,2)	3 cr
VITI 1105	Molecular Principals of Grape & Wine.....	4 cr
VITI 1148*	Winery Sanitation.....	3 cr
VITI 1160*	Winery Equipment Operation	2 cr
VITI 1110	Introduction to Wine Microorganisms.....	3 cr

Semester Three (12 credits)

BIOL 2457*	Microbiology (Goal 3).....	4 cr
ENGL 1422	Practical Writing (Goal 1)	3 cr
POLS 1435	American Government and Politics (Goals 5,9)	3 cr
VITI 1246*	Intermediate Enology – Harvest/Crush.....	2 cr

Semester Four (15 credits)

BUSN 1166	Business Communications.....	3 cr
VITI 1247*	Intermediate Enology – Post Harvest.....	2 cr
VITI 1259*	Cellar Operations Technology	2 cr
VITI 1266*	Sensory Evaluation	3 cr
VITI 1268*	Wine and Must Analysis.....	3 cr
	Elective	2 cr

Semester Five (3 credits)

VITI 1257*	Fall Wine Production Internship	3 cr
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