

Food Science and Sustainable Technologies Fermentation Science Option Four-Year Plan

	Fall	Cr	Winter	Cr	Spring	Cr
First Year	CH 231/261 : General Chemistry + Lab	5	CH 232/262 : General Chemistry + Lab	5	CH 233/263 : General Chemistry + Lab	5
	FST 101 : Food Science Orientation	1	MTH 112Z : Elementary Functions		Soil 205 Soil Science	3
	MTH 111Z : College Algebra*	4		4	Soil 206 Soil Science Lab	1
	1st year courses with flexible scheduling: COMM 111Z : Public Speaking (4), HHS 231 Lifetime Fitness (2), Physical Activity Course (1), WR 121Z English Composition (4) Two Bacc. Core Perspectives (6), Option Elective (3)					
Second Year	BI 221 : Principles of Biology I	4	BI 222 : Principles of Biology	4	BB 350 : Elementary Biochemistry	4
	CH 331 : Organic Chemistry	4	CH 332 : Organic Chemistry II	4	FST 360 : Food Safety and Sanitation	3
	PH 201 : General Physics	5	FST 299 (2) Careers in Foods	2	MTH 252 : Integral Calculus or	4
			MTH 251 : Differential Calculus or	4	MTH 228 Calculus & Prob. Life Sci. II	
	2nd year courses with flexible scheduling: Writing 227Z Technical Writing (4), Bacc. Core Perspective (3) + Free elective (1)					
Third Year	FST 370 : Industry Prep/HACCP	3	FST 499 (2) Food Laws & Regulations	2	FST 327 Intro. Sustainable Food Processing	3
	FST 472 : Food Engr. & Processing I	4	FST 473: Food Engr. & Processing II	4	FST 479 : Fermentation Microbiology	
	FST 422 : Food Chemistry Fundamentals	4	BOT 331 Plant Physiology	4	ST 351 : Intro to Statistical Methods	3
	MB 302 : General Microbiology	3			FST 385 : Communicating Food &	4
	MB 303 Gen. Micro Lab. or FST 399 Micro. Techniques for Food Industry	2			Fermentation Science	3
	3rd year courses with flexible scheduling: Two Bacc. Core Perspectives courses (6-7), CH 337 Organic Chem. Lab, ST 352 Intro. Statical Methods**					
Fourth Year	Winery Internship recommended	4	HORT 453 Grapevine Growth and Physiology	3	FST 469 Practice & Anlys. of Winemaking	5
		4	FST 420 Sensory Evaluation of Food	3	FST 470 Winemaking Lab	3
			FST 466 Chemistry and Biochemistry of Wine	3	HORT 454 Prin. & Practices of Vineyard	
			ST 352 Intro Statistical Methods		Prod.	
	4 th year courses with flexible scheduling: Two Sustainability / Bacc. Core Synthesis courses (7), Option Electives (6), CH 324 Quantitative Analysis (4),					

*Math requirements vary based on placement ([ALEKS](#))

[Enology & Viticulture Option Complete Requirements](#)

**May need to complete one or both of CH337 and ST352 in summer sessions to be able to devote fall of year four to winery harvest internship.