

BIOTECHNOLOGY CONCENTRATION

The biotechnology concentration is designed for students wishing to pursue advanced degrees in plant molecular biology and biotechnology and/or careers in the plant biotechnology industry. For example, the curriculum will prepare students to be competitive for entrance into MS and PhD degree programs, which in turn, prepare students for life as professional scientists. Alternatively, the plant biotechnology industry and biotechnology-affiliated industries have recurrent demand for competent BS-level scientists. One hallmark of the degree is requirement for students to participate in research directly in an affiliated faculty member's lab. This hands-on experience is reported by students to be a highlight of their degree program.

Requirements for the Bachelor of Science in Plant Sciences • Plant Sciences Major • Biotechnology Concentration

First Year	
Agriculture and Natural Resources 100 or First Year Studies 101	1
¹ Arts and Humanities Elective*	3
Biology 111*, 112*	8
Chemistry 120* and 130*	8
English 101*, 102*	6
¹ Quantitative Reasoning Electives*	6
Second Year	
Agriculture and Natural Resources 290	3
Agricultural Economics 212	3
¹ Arts and Humanities Elective*	3
Communication Studies 210* or 240*	3
¹ Cultures and Civilizations Elective*	3
Environmental and Soil Sciences 210	4
² Economics Elective*	3-4
Plant Sciences 210	3
^{1,2} Social Sciences Elective*	3
Unrestricted Electives	2-3
Third Year	
Biochemistry and Cellular and Molecular Biology 321	4
¹ Cultures and Civilizations Elective*	3
Chemistry 350	3
Entomology and Plant Pathology 313 or 321 or 410	3
Environmental and Soil Sciences 334	3
³ Plant Sciences Electives	9
Plant Sciences 457-458 or 457-459	3
Technical Electives	3
Fourth Year	
Physics 221*	4
Plant Sciences 353, 454, 461 and 470	9
Plant Sciences 454 or Biochemistry and Cellular and Molecular Biology 404	3-4
Plant Sciences 492 or 497	3
Technical Electives	10-11
	Total 124

* Meets University General Education Requirement.

¹ Choose from the University General Education lists. Selection should be made in conference with academic advisor.

² Economics 201 (4) Principles of Economics satisfies the University General Education-Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credits, it will satisfy the major requirement for economics but will not satisfy the General Education-Social Science requirement. In these cases, the student should take two courses from the approved General Education-Social Sciences list.

³ Select any Plant Sciences courses beyond those that are required.

Students must meet the University General Education Requirement Communicating through Writing by selecting a course with a (WC) designation. This course may be in the major or from another discipline. Plant Sciences 448 satisfies the Communicating through Writing requirement.

TECHNICAL ELECTIVES

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Biochemistry and Cellular and Molecular Biology, Biosystems Engineering, Biosystems Engineering Technology, Chemistry, Ecology and Evolutionary Biology, Management, Marketing, Microbiology, Physics, Spanish, Statistics; 200-level and above from Biology, Business Administration; 300-level and above from Agricultural Economics, Environmental and Soil Science, Forestry, Plant Sciences; Accounting 200; Business Law 301; English 295, 360; Finance 301; Geology 201, 202; Journalism/Electronic Media 450, 451, 456.