



## Specialization in Plant Biotechnology and Improvement

This specialization focuses on the biochemical and molecular aspects of crops, including crop growth and development, crop physiology, and plant improvement and breeding. This specialization prepares students for careers in laboratory and field research and is also an excellent preparation for pursuing graduate and professional studies. The large number of elective courses allows students to specialize in cutting-edge areas of plant biology or related disciplines.



Semester	Courses	Credit
<b>Fifth Semester (Fall)</b>		
HOS 3020C	<sup>TC</sup> Principles of Horticultural Crop Production	4
CHM 2210	Organic Chemistry 1	3
STA 2023	Introduction to Statistics I	3
AGR3303	Genetics	3
	Approved electives	2
	<b>Total</b>	<b>15</b>
<b>Sixth Semester (Spring)</b>		
STA 3024	Introduction to Statistics II	3
AGR 4320	Plant Breeding	3
HOS 4933	<sup>TC</sup> Professional Development in Horticulture	1
CHM 2211	Organic Chemistry 2	3
CHM 2211L	Organic Chemistry Lab	2
	Approved electives	3
	<b>Total</b>	<b>15</b>

<b>Seventh Semester (Fall)</b>		
HOS 4304	<sup>TC</sup> Horticultural Physiology	3
HOS 3305	Intro. to Plant Molecular Biology	3
HOS 4313C	Lab Methods in Plant Mol. Biology	2
HOS 4918	Capstone Planning	1
BCH 4024	Introduction to Biochemistry	4
	Approved electives	2
	<b>Total</b>	<b>15</b>

<b>Eighth Semester (Spring)</b>		
HOS4241C	Genetics and Breeding of Vegetable Crops	3
HOS 4921	<sup>TC</sup> Horticultural Sciences Capstone	2 - 4
	Approved electives	10
	<b>Total</b>	<b>15</b>

<sup>TC</sup>Semester tracking course