

**UNDERGRADUATE PROGRAM CURRICULUM
AGRICULTURE – USP/ESALQ
2017**

Courses are sorted by recommended completion sequence		Credits			Hours	
Mandatory Courses		In class	Workload	Total	Total	Semester
0110113	Introduction to Agriculture	2	0	2	30	1
0110130	Academic Life	2	0	2	30	1
LCB0103	Plant Morphology	4	0	4	60	1
LCE0108	Inorganic and Analytical Chemistry	6	0	6	90	1
LCE0120	Calculus I	4	0	4	60	1
LES0180	Introduction to Management	2	0	2	30	1
LFN0212	General Animal Science and Parasitology	2	0	2	30	1
LGN0114	Cell Biology	3	1	4	75	1
LZT0100	Animal Science	4	0	4	60	1
First Semester - Total		29	1	30	465	
LCB0208	Biochemistry	4	0	4	60	2
LCB1204	Systematic Botany	4	0	4	60	2
	<i>LCB0103 - Plant Morphology</i>					
LCE0220	Calculus II	4	0	4	60	2
	<i>LCE0120 - Calculus I</i>					
LES0160	Applied Mathematics for Finances	2	0	2	30	2
LES0213	Principles of Economics, Politics and Development	2	0	2	30	2/3
LES0216	Knowledge and Research	2	0	2	30	2
LGN0215	Genetics	3	1	4	75	2
	<i>LGN0114 - Cell Biology</i>					
LGN0232	Molecular Genetics	2	0	2	30	2
LSO0210	Geology Applied to Soils	2	0	2	30	2
	<i>LCE0108 - Inorganic and Analytical Chemistry</i>					
LZT0313	Animal Anatomy and Physiology	4	0	4	60	2
Second Semester - Total		29	1	30	465	
LCB0311	Plant Physiology	4	0	4	60	3
	<i>LCB0208 - Biochemistry</i>					
	<i>LCB1204 - Systematic Botany</i>					
LCE0211	Basic Statistics	4	0	4	60	3
	<i>LCE0220 - Calculus II</i>					
LEB0200	Agro-environmental Physics	4	0	4	60	3
	<i>LCE0106 – Differential and Integral Calculus or</i>					
	<i>LCE0220 - Calculus II</i>					
LEB0340	Land Surveying and Geoprocessing I	6	0	6	90	3
LFN0321	Microbiology	4	0	4	60	3
	<i>LGN0114 - Cell Biology</i>					
LSO0300	Soil Chemistry and Fertility	4	0	4	60	3
	<i>LSO0210 - Geology Applied to Soils</i>					
LSO0310	Soil Physics	2	0	2	30	3
	<i>LEB0200 - Agro-environmental Physics (concomitant enrollment required)</i>					
	<i>LSO0210 - Geology Applied to Soils</i>					
LZT0419	Animal Production I	2	0	2	30	3
	<i>LZT0100 – Animal Science</i>					
	<i>LZT0313 - Animal Anatomy and Physiology</i>					
LZT0420	Animal Production II	2	0	2	30	3
	<i>LZT0100 – Animal Science</i>					
	<i>LZT0313 - Animal Anatomy and Physiology</i>					
Third Semester - Total		32	0	32	480	

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LAN1458	Sugar and Ethanol <i>LCB0208 - Biochemistry</i>	2	1	3	60	4
LCB1402	Plant Ecology <i>LCB0311 - Plant Physiology</i>	4	0	4	60	4
LEA0322	General Entomology <i>LFN0212 - General Animal Science and Parasitology</i>	4	0	4	60	4
LEB0450	Land Surveying and Geoprocessing II <i>LEB0340 - Land Surveying and Geoprocessing I</i>	5	0	5	75	4
LES0362	Research Project in Agriculture <i>LES0216 – Knowledge and Research</i>	2	0	2	30	
LFN0424	Plant Pathology <i>LFN0321 - Microbiology</i>	4	0	4	60	4
LSO0400	Soil Biology <i>LFN0321 - Microbiology</i> <i>LSO0300 - Soil Chemistry and Fertility</i>	2	0	2	30	4
LSO0410	Soil Genesis, Morphology and Classification <i>LSO0300 - Soil Chemistry and Fertility</i> <i>LSO0310 - Soil Physics</i>	4	0	4	60	4
LZT0520	Forage and Pasture Science <i>LZT0420 – Animal Production II or</i> <i>LZT0430 - Animal Nutrition</i>	4	0	4	60	4
Fourth Semester - Total		31	1	32	495	
LAN1444	Quality and Processing of Animal Source Foods <i>LCB0208 - Biochemistry</i> <i>LFN0321 - Microbiology</i>	2	1	3	60	5
LAN2444	Post-harvest Handling and Processing of Vegetables <i>LCB0311 - Plant Physiology</i>	2	1	3	60	5
LEA0430	Crop Pests <i>LEA0322 - General Entomology</i>	4	0	4	60	5
LEB0306	Agricultural Meteorology <i>LEB0200 - Agro-environmental Physics</i>	4	0	4	60	5
LEB0332	Mechanics and Power Units in Agriculture <i>LEB0340 - Land Surveying and Geoprocessing I</i>	2	0	2	30	5
LES0667	Agribusiness Management <i>LES0180 - Introduction to Management</i> <i>LES0213 - Principles of Economics, Politics and Development</i>	2	0	2	30	5
LPV0448	Fruit Crops <i>LCB0311 - Plant Physiology</i>	4	0	4	60	5
LPV0480	Vegetable crops, Floriculture and Landscaping <i>LCB0311 - Plant Physiology</i>	4	0	4	60	5
LSO0420	Plant Mineral Nutrition <i>LCB0311 - Plant Physiology</i> <i>LSO0400 - Soil Biology</i>	4	0	4	60	5
LSO0526	Fertilizers and Fertilization <i>LSO0400 - Soil Biology</i>	2	1	3	60	5
Fifth Semester - Total		30	3	33	540	
LCE0602	Experimental Statistics <i>LCE0211 - Basic Statistics</i>	4	0	4	60	6
LEB0432	Agricultural Machinery <i>LEB0332 - Mechanics and Power Units in Agriculture</i>	4	0	4	60	6
LEB0472	Hydraulics <i>LEB0200 - Agro-environmental Physics</i> <i>LEB0340 - Land Surveying and Geoprocessing I</i>	4	0	4	60	6
LES0129	Sociology and Extension <i>LES0213 - Principles of Economics, Politics and Development</i>	4	0	4	60	6/7
LPV0557	Rice, Bean, Corn and Wheat Production <i>LSO0420 - Plant Mineral Nutrition</i>	4	0	4	60	6
LPV0564	Cotton and Coffee Production and Introduction to Agroecology <i>LSO0420 - Plant Mineral Nutrition</i>	4	0	4	60	6
LPV0584	Sugarcane and Soybean Production <i>LSO0420 - Plant Mineral Nutrition</i>	4	0	4	60	6
LSO0660	Soil Technology <i>LSO0410 - Soil Genesis, Morphology and Classification</i> <i>LSO0526 - Fertilizers and Fertilization</i>	4	0	4	90	6
Sixth Semester - Total		32	0	32	480	

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Mandatory Courses		In class	Workload	Total	Total	Semester
LCF1581	Forest Resources in Agricultural Properties <i>LCB1402 - Plant Ecology</i>	4	1	5	90	7
LEB0418	Rural Buildings and Technical Drawing <i>LEB0340 Land Surveying and Geoprocessing</i>	4	0	4	60	7/8
LEB1440	Hydrology and Drainage <i>LEB0472 - Hydraulics</i> <i>LSO0410 - Soil Genesis, Morphology and Classification</i>	4	0	4	60	7
LEB1571	Irrigation <i>LCB0311 - Plant Physiology</i> <i>LEB0306 - Agricultural Meteorology</i> <i>LEB0472 - Hydraulics</i>	4	0	4	60	7
LGN0313	Plant Breeding <i>LGN0215 - Genetics</i> <i>LGN0232 - Molecular Genetics</i>	4	0	4	60	7
LPV0638	Seed Production	4	0	4	60	7
LPV0671	Weed Control <i>LCB0311 - Plant Physiology</i>	4	1	5	90	7
Seventh Semester - Total		28	2	30	480	
0111000	Final Report in Agriculture	2	4	6	150	9/10
Grand Total		213	12	225	3555	

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Students admitted after 2007 must work 210 hours in internship courses of their own choice

Ideal duration: 10 semesters	Minimum duration: 9 semesters	Maximum duration: 15 semesters
Total credits required for program completion: 280 (in class + workload)		
Completion requirements for Licentiate degree in Agriculture: 280 credits (in class + workload) + # of credits required for licentiate degree.		