

Department of Integrative Agriculture

 Bachelor of Science in Horticulture Model Study Plan (2022-2023 Cohort onwards)
 Concentration: Crop Production and Organic Farming

 For Students Admitted to the University in the Fall Semester
 Total Degree Credit hours: 120

Semester	Course Code	Course Title	CH	Course type
Year 1 1 (Fall)	CHEM111	General Chemistry I	3	Specialization
	BIOC100	Basic Biology I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)
	ESPU106	Introduction to Academic English For Food & Agriculture	3	Gen Ed Course (Cluster 1: Area 2: English Communication)
	ISLM100/ISLM101	Islamic Culture/Biography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
	GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
			15	
Year 1 2 (Spring)	MATH105	Calculus I	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)
	ARAG220	Natural Resources	3	Specialization
	GEIT112	Fourth Industrial Revolution	3	Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)
	ELECTIVE	Student choice	3	Free Elective
			12	
Year 2 3 (Fall)	HSS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)
	GESU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
	ARAG200	Principles of Soil and Water	3	Specialization
	ARAG307	Introduction to Horticulture	2	Specialization
	BIOL215	Plant Biology	3	Specialization
	BIOL225	Practical Plant Biology	1	Specialization
			15	
Year 2 4 (Spring)	PHYS105	General Physics I	3	College Requirement
	CHEM282	Organic Chemistry for Non-Majors	3	Specialization
	ARAG242	Principles of Plant Protection	3	Specialization
	ARAG310	Agricultural Technology Transfer	3	Specialization
	ELECTIVE	Student choice	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
			15	
Year 3 5 (Fall)	ARAG311	Plant Propagation	2	Specialization
	CHEM283	Biochemistry for Non-Majors	3	Specialization
	ARAG327	Plant Physiology and Environmental Stress	3	Specialization
	BIOL270	General Genetics	2	Specialization
	ELECTIVE	Student choice	3	Major Elective
	ELECTIVE	Student choice	3	Minor Elective
			16	
Year 3 6 (Spring)	ARAG308	Soil Fertility and Fertilizer	3	Specialization
	STAT235	Statistics for Biology	3	College Requirement
	ARAG465	Salt and Drought Tolerant Plants	2	Specialization
	PHI180	Critical Thinking	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
	ELECTIVE	Student choice	3	Major Elective
	ARAG305	Principles of Organic Horticulture	3	Concentration
			17	
Year 4 7 (Fall)	ARAG407	Design of Organic Production System	3	Concentration
	ARAG485	Senior Project	3	Training
	ARAG443	Irrigation, Drainage and Water Management	3	Specialization
	ELECTIVE	Student choice	3	Major Elective
	ELECTIVE	Student choice	3	Minor Elective
			15	
Year 4 8 (Spring)	ARAG452	Palms and Dates	3	Concentration
	ARAG404	Vegetable Production in Arid Lands	3	Concentration
	ARAG445	Internship	3	Internship
	ELECTIVE	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)
	ELECTIVE	Student choice	3	Free Elective
			15	


Department of Integrative Agriculture
Bachelor of Science in Horticulture Model Study Plan (2022-2023 Cohort onwards)
Concentration: Crop Production and Organic Farming
For Students Admitted to the University in the Spring Semester
Total Degree Credit hours: 120

Semester	Course Code	Course Title	CH	Course type
1 (Spring)	CHEM111	General Chemistry I	3	Specialization
	BIOC100	Basic Biology I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)
	ESPU106	Introduction to Academic English For Food & Agriculture	3	Gen Ed Course (Cluster 1: Area 2: English Communication)
	ISLM100/ISLM101	Islamic Culture/Biography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
	MATH105	Calculus I	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)
	ARAG220	Natural Resources	3	Specialization
			18	
2 (Fall)	HSS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)
	GESU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
	ARAG200	Principles of Soil and Water	3	Specialization
	ARAG307	Introduction to Horticulture	2	Specialization
	BIOL215	Plant Biology	3	Specialization
	BIOL225	Practical Plant Biology	1	Specialization
			15	
3 (Spring)	PHYS105	General Physics I	3	College Requirement
	CHEM282	Organic Chemistry for Non-Majors	3	Specialization
	ARAG310	Agricultural Technology Transfer	3	Specialization
	ARAG242	Principles of Plant Protection	3	Specialization
	GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
			15	
4 (Fall)	ARAG311	Plant Propagation	2	Specialization
	CHEM283	Biochemistry for Non-Majors	3	Specialization
	ARAG327	Plant Physiology and Environmental Stress	3	Specialization
	BIOL270	General Genetics	2	Specialization
	ELECTIVE	Student choice	3	Major Elective
	ELECTIVE	Student choice	3	Minor Elective
			16	
5 (Spring)	ARAG308	Soil Fertility and Fertilizer	3	Specialization
	STAT235	Statistics for Biology	3	College Requirement
	ARAG465	Salt and Drought Tolerant Plants	2	Specialization
	GEIT112	Fourth Industrial Revolution	3	Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)
	ELECTIVE	Student choice	3	Minor Elective
			3	Concentration
			17	
6 (Fall)	ARAG407	Design of Organic Production System	3	Concentration
	ELECTIVE	Student choice	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
	ARAG443	Irrigation, Drainage and Water Management	3	Specialization
	ELECTIVE	Student choice	3	Major Elective
			12	
7 (Spring)	ARAG452	Palms and Dates	3	Concentration
	ARAG404	Vegetable Production in Arid Lands	3	Concentration
	ELECTIVE	Student choice	3	Major Elective
	PHI180	Critical Thinking	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
	ELECTIVE	Student choice	3	Free Elective
			15	
8 (Fall)	ARAG445	Internship	3	Internship
	ARAG485	Senior Project	3	Training
	ELECTIVE	Student choice	3	Free Elective
	ELECTIVE	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)
			12	

Department of Integrative Agriculture
Bachelor of Science in Horticulture Model Study Plan (2022-2023 Cohort onwards)
Concentration: Environment Horticulture

For Students Admitted to the University in the Fall Semester
 Total Degree Credit hours: 120

Semester	Course Code	Course Title	CH	Course type
Year 1 1 (Fall)	CHEM111	General Chemistry I	3	Specialization
	BIOC100	Basic Biology I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)
	ESPU106	Introduction to Academic English For Food & Agriculture	3	Gen Ed Course (Cluster 1: Area 2: English Communication)
	ISLM100/ISLM101	Islamic Culture/Biography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
	GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
			15	
Year 2 2 (Spring)	MATH105	Calculus I	3	College Requirement
	ARAG220	Natural Resources	3	Specialization
	GEIT112	Fourth Industrial Revolution	3	Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)
	ELECTIVE	Student choice	3	Free Elective
			12	
Year 2 3 (Fall)	HSS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)
	GESU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
	ARAG200	Principles of Soil and Water	3	Specialization
	ARAG307	Introduction to Horticulture	2	Specialization
	BIOL215	Plant Biology	3	Specialization
	BIOL225	Practical Plant Biology	1	Specialization
			15	
Year 3 4 (Spring)	PHYS105	General Physics I	3	College Requirement
	CHEM282	Organic Chemistry for Non-Majors	3	Specialization
	ARAG242	Principles of Plant Protection	3	Specialization
	ARAG310	Agricultural Technology Transfer	3	Specialization
	ELECTIVE	Student choice	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
			15	
Year 3 5 (Fall)	ARAG311	Plant Propagation	2	Specialization
	CHEM283	Biochemistry for Non-Majors	3	Specialization
	ARAG327	Plant Physiology and Environmental Stress	3	Specialization
	BIOL270	General Genetics	2	Specialization
	ELECTIVE	Student choice	3	Major Elective
	ELECTIVE	Student choice	3	Minor Elective
			16	
Year 4 6 (Spring)	ARAG308	Soil Fertility and Fertilizer	3	Specialization
	STAT235	Statistics for Biology	3	College Requirement
	ARAG465	Salt and Drought Tolerant Plants	2	Specialization
	PHI180	Critical Thinking	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
	ELECTIVE	Student choice	3	Major Elective
	ELECTIVE	Student choice	3	Minor Elective
			17	
Year 4 7 (Fall)	ARAG451	Landscape Management for Arid Lands	3	Concentration
	ARAG453	Indoor Plants and Flower Arrangements	3	Concentration
	ARAG443	Irrigation, Drainage and Water Management	3	Specialization
	ARAG485	Senior Project	3	Training
	ELECTIVE	Student choice	3	Major Elective
			15	
Year 4 8 (Spring)	ARAG402	Woody Plants in the Landscape	3	Concentration
	ARAG454	Landscape Design	3	Concentration
	ARAG445	Internship	3	Internship
	ELECTIVE	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)
	ELECTIVE	Student choice	3	Free Elective
			15	

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For Students Admitted to the University in the Spring Semester
Total Degree Credit hours: 120

Semester	Course Code	Course Title	CH	Course type
Year 1 1 (Spring)	CHEM111	General Chemistry I	3	Specialization
	BIOC100	Basic Biology I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)
	ESPU106	Introduction to Academic English For Food & Agriculture	3	Gen Ed Course (Cluster 1: Area 2: English Communication)
	ISLM100/ISLM101	Islamic Culture/Biography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
	MATH105	Calculus I	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)
	ARAG220	Natural Resources	3	Specialization
Year 1 2 (Fall)	HSS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)
	GESU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
	ARAG200	Principles of Soil and Water	3	Specialization
	ARAG307	Introduction to Horticulture	2	Specialization
	BIOL215	Plant Biology	3	Specialization
	BIOL225	Practical Plant Biology	1	Specialization
Year 2 3 (Spring)	PHYS105	General Physics I	3	College Requirement
	CHEM282	Organic Chemistry for Non-Majors	3	Specialization
	ARAG310	Agricultural Technology Transfer	3	Specialization
	ARAG242	Principles of Plant Protection	3	Specialization
	GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
Year 2 4 (Fall)	ARAG311	Plant Propagation	2	Specialization
	CHEM283	Biochemistry for Non-Majors	3	Specialization
	ARAG327	Plant Physiology and Environmental Stress	3	Specialization
	BIOL270	General Genetics	2	Specialization
	ELECTIVE	Student choice	3	Major Elective
	ELECTIVE	Student choice	3	Minor Elective
Year 3 5 (Spring)	ARAG308	Soil Fertility and Fertilizer	3	Specialization
	STAT235	Statistics for Biology	3	College Requirement
	ARAG465	Salt and Drought Tolerant Plants	2	Specialization
	GEIT112	Fourth Industrial Revolution	3	Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)
	ELECTIVE	Student choice	3	Minor Elective
Year 3 6 (Fall)	ARAG451	Landscape Management for Arid Lands	3	Concentration
	ELECTIVE	Student choice	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
	ARAG443	Irrigation, Drainage and Water Management	3	Specialization
	ELECTIVE	Student choice	3	Major Elective
	ARAG453	Indoor Plants and Flower Arrangements	3	Concentration
Year 4 7 (Spring)	ARAG402	Woody Plants in the Landscape	3	Concentration
	ARAG454	Landscape Design	3	Concentration
	ELECTIVE	Student choice	3	Major Elective
	PHI180	Critical Thinking	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
	ELECTIVE	Student choice	3	Free Elective
Year 4 8 (Fall)	ARAG445	Internship	3	Internship
	ARAG485	Senior Project	3	Training
	ELECTIVE	Student choice	3	Free Elective
	ELECTIVE	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)
			12	

Department of Integrative Agriculture
Bachelor of Science in Horticulture Model Study Plan (2025-2026 Cohort onwards)
Concentration: Environment Horticulture
For Students Admitted to the University in the Fall and Spring Semester
Total Degree Credit hours: 120

Semester	Course Code	Course Title	CH	Course type
Year 1 1 (Fall)	CHEM111	General Chemistry I	3	Specialization
	BIOC100	Basic Biology I	3	College Requirement
	GEAE101	Academic English for Humanities and STEM	3	Gen. Ed. Theme 2: Academic Language Proficiency
	MATH105	Calculus I	3	College Requirement
	GESU121	Sustainability	3	Gen. Ed. Theme 5: Sustainability
			15	
Year 2 2 (Spring)	PHYS105	General Physics I	3	College Requirement
	ARAG220	Natural Resources	3	Specialization
	Elective	Student choice	3	Gen. Ed. Theme 4: Entrepreneurship
	Elective	Student choice	3	Free Elective
	Elective	Student choice	3	Gen. Ed. Theme 6 or 7 or 8 or 9 or 10
			15	
Year 2 3 (Fall)	GEEM110	Contemporary Emirati Studies	3	Gen. Ed. Theme 1: UAE National Identity
	CHEM282	Organic Chemistry for Non-Majors	3	Specialization
	ARAG200	Principles of Soil and Water	3	Specialization
	ARAG307	Introduction to Horticulture	2	Specialization
	BIOL215	Plant Biology	3	Specialization
Year 3 4 (Spring)	BIOL225	Practical Plant Biology	1	Specialization
				15
	STAT235	Statistics for Biology	3	College Requirement
	ARAG242	Principles of Plant Protection	3	Specialization
	ARAG310	Agricultural Technology Transfer	3	Specialization
Year 3 5 (Fall)	GEIT113	Introduction to Artificial Intelligence	3	Gen. Ed. Theme 3: Innovation
	Elective	Student choice	3	Major Elective
				15
	ARAG311	Plant Propagation	2	Specialization
	CHEM283	Biochemistry for Non-Majors	3	Specialization
Year 3 6 (Spring)	ARAG327	Plant Physiology and Environmental Stress	3	Specialization
	BIOL270	General Genetics	2	Specialization
	Elective	Student choice	3	Major Elective
	Elective	Student choice	3	Elective Concentration
				16
Year 4 7 (Fall)	ARAG308	Soil Fertility and Fertilizer	3	Specialization
	ARAG321	Floriculture Crop Production	3	Specialization
	ARAG465	Salt and Drought Tolerant Plants	2	Specialization
	Elective	Student choice	3	Gen. Ed. Theme 6 or 7 or 8 or 9 or 10
	Elective	Student choice	3	Major Elective
Year 4 8 (Spring)	Elective	Student choice	3	Elective Concentration
				17
	ARAG451	Landscape Management for Arid Lands	3	Concentration
	ARAG453	Indoor Plants and Flower Arrangements	3	Concentration
	ARAG443	Irrigation, Drainage and Water Management	3	Specialization
Year 4 8 (Spring)	ARAG485	Senior Project	3	Training
	Elective	Student choice	3	Major Elective
				15
	ARAG402	Woody Plants in the Landscape	3	Concentration
	ARAG454	Landscape Design	3	Concentration
Year 4 8 (Spring)	ARAG445	Internship	3	Internship
	Elective	Student choice	3	Free Elective
				12

Bachelor of Science in Horticulture Model Study Plan (2025-2026 Cohort onwards)
Concentration: Crop Production and Organic Farming

For Students Admitted to the University in the Fall and Spring Semester
Total Degree Credit hours: 120

	Semester	Course Code	Course Title	CH	Course type
Year 1	1 (Fall)	CHEM111	General Chemistry I	3	Specialization
		BIOC100	Basic Biology I	3	College Requirement
		GEAE101	Academic English for Humanities and STEM	3	Gen. Ed. Theme 2: Academic Language Proficiency
		MATH105	Islamic Culture/Biography of the Prophet "Sira"	3	College Requirement
		GESU121	Sustainability	3	Gen. Ed. Theme 5: Sustainability
				15	
Year 2	2 (Spring)	PHYS105	General Physics I	3	College Requirement
		ARAG220	Natural Resources	3	Specialization
		Elective	Student choice	3	Gen. Ed. Theme 4: Entrepreneurship
		Elective	Student choice	3	Free Elective
		Elective	Student choice	3	Gen. Ed. Theme 6 or 7 or 8 or 9 or 10
				15	
Year 3	3 (Fall)	GEEM110	Contemporary Emirati Studies	3	Gen. Ed. Theme 1: UAE National Identity
		CHEM282	Organic Chemistry for Non-Majors	3	Specialization
		ARAG200	Principles of Soil and Water	3	Specialization
		ARAG307	Introduction to Horticulture	2	Specialization
		BIOL215	Plant Biology	3	Specialization
		BIOL225	Practical Plant Biology	1	Specialization
Year 4	4 (Spring)	STAT235	Statistics for Biology	3	College Requirement
		ARAG242	Principles of Plant Protection	3	Specialization
		ARAG310	Agricultural Technology Transfer	3	Specialization
		GEIT113	Introduction to Artificial Intelligence	3	Gen. Ed. Theme 3: Innovation
		Elective	Student choice	3	Major Elective
				15	
Year 5	5 (Fall)	ARAG311	Plant Propagation	2	Specialization
		CHEM283	Biochemistry for Non-Majors	3	Specialization
		ARAG327	Plant Physiology and Environmental Stress	3	Specialization
		BIOL270	General Genetics	2	Specialization
		Elective	Student choice	3	Major Elective
		Elective	Student choice	3	Elective Concentration
Year 6	6 (Spring)	ARAG308	Soil Fertility and Fertilizer	3	Specialization
		ARAG305	Principles of Organic Horticulture	3	Specialization
		ARAG465	Salt and Drought Tolerant Plants	2	Specialization
		Elective	Student choice	3	Gen. Ed. Theme 6 or 7 or 8 or 9 or 10
		Elective	Student choice	3	Major Elective
		Elective	Student choice	3	Elective Concentration
Year 7	7 (Fall)	ARAG407	Design of Organic Production System	3	Concentration
		ARAG410	Fruit Production in Arid Lands	3	Concentration
		ARAG443	Irrigation, Drainage and Water Management	3	Specialization
		ARAG485	Senior Project	3	Training
		Elective	Student choice	3	Major Elective
				15	
Year 8	8 (Spring)	ARAG404	Vegetable Production in Arid Lands	3	Concentration
		ARAG452	Palms and Dates	3	Concentration
		ARAG445	Internship	3	Internship
		Elective	Student choice	3	Free Elective
				12	