

BACHELOR IN AGRICULTURAL SCIENCE IN AGRICULTURAL AND ENVIRONMENTAL SYSTEMS



UPR CODE 0109 – V 2021

First Year

First Semester			Second Semester		
Code	Title	Num. of Credits	Code	Title	Num. of Credits
INGL 3***	First year course in English	3	INGL 3***	First year course in English	3
ESPA 3101	Basic course in Spanish I	3	ESPA 3102	Basic course in Spanish II	3
MATE 3171	Pre-Calculus I	3	MATE 3172	Pre-Calculus II	3
BIOL 3061	General Biology I	3	BIOL 3062	General Biology II	3
BIOL 3063	Laboratory of General Biology I	1	BIOL 3064	Laboratory of General Biology II	1
INGE 3011	Engineering Graphics I	2	SAGA 3016	Computing and Communication in Agricultural and Environmental Systems	3
EDAG 3005	Agricultural Orientation	1			
Total for Semester:		16	Total for Semester:		16

Second Year

First Semester			Second Semester		
Code	Title	Num. of Credits	Code	Code	Title
INGL 3***	Second year course in English	3	INGL 3***		Second year course in English
QUIM 3131	General Chemistry I	3	QUIM 3132		General Chemistry II
QUIM 3133	General Chemistry Laboratory I	1	QUIM 3134		General Chemistry Laboratory II
MATE 3049	Mathematical Analysis for Management Sciences	3	ECON 3021 or		Principles of Economics: Microeconomics, or
FISI 3091	Elements of Physics	3	ECAG 3005		Principles of Agricultural Economic Analysis
FISI 3092	Elements of Physics Laboratory	1	SAGA 4048		Farm Buildings
CFIT 3005	Fundamentals of Crop Production	4	CIAN 3011		Fundamentals of Animal Science
			CIAN 3012		Laboratory of Practices in Animal Science
Total for Semester:		18	Total for Semester:		17

Third Year

First Semester			Second Semester		
Code	Title	Num. of Credits	Code	Code	Title
AGRO 3011	Fundamentals of Soil Science	2	INCI 4005		Agricultural Surveying
AGRO 3013	Soil Science Laboratory	1	SAGA 4041		Agricultural Tractors and Machinery
SAGA 4129	Agricultural Products Processing	3	SAGA 4319		Farm Drainage and Irrigation
CSOC/SOHA	Elective in Social Sciences or Elective in Humanities	3	SAGA 4505		Electrotechnology
ELEC ECAG	Elective in Agricultural Economy	3	LIBR		Free Elective
CFIT 4005	Physiological Principles of Crop Production	3			
EDFI 3***	Physical Education Elective	1			
Total for Semester:		16	Total for Semester:		16

Summer

Code	Title	Num. of Credits
SAGA 4008	Agricultural and Environmental Systems Practicum	3
Total for Summer:		3

Fourth Year

First Semester			Second Semester		
Code	Title	Num. of Credits	Code	Code	Title
SAGA 4335	Soil and Water Management	4	SOHA		Elective course in Humanities
SAGA 4036	Seminar in Agricultural and Environmental Systems	1	LIBR		Free Elective
LIBR	Free Elective	3	LIBR		Free Elective
ELEC ECAG	Elective in Agricultural Economy	3	ELEC ECAG		Elective in Agricultural Economy
PROF	Professional Elective	3	PROF		Professional Elective
EDFI 3***	Physical Education Elective	1			
Total for Semester:		15	Total for Semester:		15

Total Credits Required in the Program: 132

Electives:

To provide the flexibility necessary for students to achieve their academic and professional goals, the curriculum allows them to select specific courses from approved lists. It is recommended to visit the academic advisor prior to enrolling in courses.

- **Professional Electives (6 credits):** These are courses of specialization in agricultural and environmental systems. Must be SAGA or INAG courses of 4000 level or above.
- **Electives in Social Sciences and Humanities (9 credits):** Will be selected by the student, with the advisor's approval, from a list of recommended courses of 3000 level or above as follows:
 - 3 credits in ECON 3021: Microeconomics or ECAG 3005: Principles of Agricultural Economic Analysis. (Only one of the two courses will be counted toward the degree)
 - 3 credits in Humanities (ALEM, ARTE, CHIN, FILO, FRAN, GRIE, HUMA, ITAL, JAPO, LATI, LITE, MUSI, RUSO or TEAT)
 - 3 credits in Humanities (see above) or Social Sciences (ANTR, CIPO, CISO, ECAG 3015, ECAG 4006, ECAG 4015, ECAG 4026, ECAG 4027, ECON 3022, ECON 3091, ECON 3092, ECON 4037, ECON 4056, GEOG, HIST, PSIC or SOCI)
- **Electives in Agricultural Economy (9 credits):** The student, with the help of the advisor, will choose three (3) of the following courses:
 - ECAG 3015 – Agricultural Law (3 cr.)
 - ECAG 4006 – Introduction to Consumer Economics (3 cr.)
 - ECAG 4007 – Marketing of Agricultural Products (3 cr.)
 - ECAG 4015 – Introduction to Resource Economics (3 cr.)
 - ECAG 4019 – Farm Management and Accounting (3 cr.)
 - ECAG 4028 – Agricultural Finance (3 cr.)
 - ECAG 4029 – Agribusiness Management (3 cr.)
 - ECAG 5006 – Feasibility Studies Agricultural Enterprises (3 cr.)

Note: The student must have approved ECON 3021 or ECAG 3005 to enroll in the above-mentioned courses. The ECAG 5006 course requires an approved ECAG 4019.

- **Physical Education (2 credits):** The student will choose 1 or 2 courses in EDFI at 3000 level or above.
- **Free Electives (12 credits):** The student will choose, with the advisor's help, twelve (12) credit hours in 3000 to 6000 level courses that are not equivalent to, similar to, or of lesser difficulty than other courses in the curriculum. Free electives may be used to take courses in curricular sequences, minor concentrations, complete requirements for graduate studies, or that serve the student's professional goals and interests.