



Interamerican University of Puerto Rico
Aguadilla Campus
Department of Science Technology

Sequential Bachelor of Applied Science in Computer Science
STUDENTS ADMITTED AUGUST 2024

Effective Date: 2024

FIRST YEAR – FIRST SEMESTER

CODE	COURSE	CRS.
COMP 2051	Client-Side Web Development ("Front-End")	3
COMP 2120	Programming Logic	3
COMP 2200	User Experience and Interface Design ("UX & UI")	3
GEEN 1101 GEEN 1201 GEEN 2311	English I (One of them according to the results of the College Board)	3
GEMA 1200	Fundamentals of Algebra	3
TOTAL		15

FIRST YEAR – SECOND SEMESTER

CODE	COURSE	CRS.
COMP 2052	Server-Side Web Development and Microservices ("Back-End") (requirement COMP 2120 and 2051)	3
COMP 2315	Structured Programming (requirement COMP 2120)	3
COMP 2800	Databases (requirement COMP 2120)	3
GEEN 1102 GEEN 1202 GEEN 2312	English II (One of them according to the results of the College Board)	3
GESP 1101	Literature and Communication: Narrative and Poetry	3
TOTAL		15

SECOND YEAR – FIRST SEMESTER

CODE	COURSE	CRS.
COMP 2053	Integrated Web Development ("Full-Stack") (requirement COMP 2052, 2315 and 2800)	3
COMP 2400	Object-Oriented Programming (requirement COMP 2315)	3
COMP 2700	Cybersecurity (requirement COMP 2315)	3
GEEN 1103 GEEN 1203 GEEN 2313	English III (One of them according to the results of the College Board)	3
MATH 1500	Pre-calculus (requirement GEMA 1200)	5
TOTAL		17

SECOND YEAR – SECOND SEMESTER

CODE	COURSE	CRS.
COMP 2900	Data Structures (requirement COMP 2400)	3
GEFC 1010	Introduction to the Christian Faith	3
GEHS 2010	Historical Process of Contemporary Puerto Rico	3
GEIC 1010	Information and Computer Technologies	3
GESP 1102	Literature and Communication: Essay and Theatre	3
TOTAL		15

THIRD YEAR – FIRST SEMESTER

CODE	COURSE	CRS.
COMP 2501	Discrete Computational Structures I (requirement MATH 1500)	3
COMP 3300	Computer Organization and Architecture (requirement COMP 2900)	3
COMP 3350	Network Organization and Architecture (requirement COMP 2120)	3
GESP 2203	Literature and World Vision	3
MATH 2251	Calculus I (requirement MATH 1500)	5
TOTAL		17

THIRD YEAR – SECOND SEMESTER

CODE	COURSE	CRS.
COMP 2502	Discrete Computational Structures II (requirement COMP 2501)	3
COMP 2850	Mobile Computing (requirement COMP 2315)	3
COMP 3401	Software Engineering I ("Capstone") (requirement COMP 2400 and 2800)	3
GEHP 3000	Comprehensive Health and Quality of Life	3
GEST 2020	The Natural Environment and Human Beings	3
GEST 2030	Technology and Environment	
TOTAL		15

FOURTH YEAR – FIRST SEMESTER

CODE	COURSE	CRS.
COMP 3402	Software Engineering II ("Capstone") (requirement COMP 3401)	3
COMP 3500	Operating Systems (requirement COMP 3300)	3
PRESCRIBED DISTRIBUTIVE	Prescribed distributive course	3
ELECTIVE COURSE	Elective course (Choose one course)	3
GEPE 3010	Art Appreciation	3
GEPE 3020	Music Appreciation	
GEPE 3030	Theatre Appreciation (Select one of the three courses)	
TOTAL		15

FOURTH YEAR – SECOND SEMESTER

CODE	COURSE	CRS.
COMP 4250	Distributed Computing ("Cloud") (requirement COMP 2315 and 3350)	3
COMP 4910	Professional Practice and Ethics (requirement COMP 3350 and 3402)	3
GEEC 2000	Entrepreneurial Culture	3
GEHS 3020	Global Society	3
GEHS 3050	Human Development, Society and Culture	
GEHS 4020	Ancient and Medieval Western Civilization	
GEHS 4030	Modern and Contemporary Western Civilization (Select one of the four courses)	
GEPE 4040	Ethics and Social Responsibility	3
TOTAL		15

REQUIREMENTS FOR THE BACHELOR'S DEGREE

DEGREE REQUIREMENTS	CREDITS
General education requirements	48
Concentration requirements	70
Prescribed distributive requirements	3
Elective courses	3
TOTAL	124

NOTES:

In the English curriculum, students will take one of the following sequences according to their PAA score:

Level 1 – Elementary: PAA score up to 440

Level 2 – Intermediate: PAA score from 441–580

Level 3 – Advanced: PAA score of 581 or higher

PRESCRIBED DISTRIBUTIVE REQUIREMENTS

COURSE CODE	CREDITS
COMP 3600 Computer Graphics	3
COMP 3800 Programming Languages	3
COMP 397_ Special Topics	1-6
COMP 4170 Parallel Computing	3
COMP 4415 Computer Forensics	3
COMP 4480 Artificial Intelligence	3
COMP 4580 Introduction to Robotics	3
MATH 2100 Introduction to Probability and Statistics	3

The COMP 4910 course is designed to be completed online. Although a student may be assigned to a practicum site that requires in-person hours, if the student is unable to fulfill this modality or if no practicum site is available in their region, the requirement may be completed through a Special Project. Therefore, the program does not require mandatory in-person attendance in order to complete these courses.