

**BACHELOR OF SCIENCE DEGREE IN COMPUTER SCIENCES (B.S.)  
MAJOR: COMPUTER PROGRAMMING**

Minimum Requirements:

37 credit hours in General Studies  
 42 credit hours in Core Courses  
 45 credit hours in Concentration Courses  
 6 credit hours in Elective Courses  
 130 Credits hours required for graduation

<b>1. General Studies</b>		<b>Credit Hours</b>
ENGL 101-102	Basic Course in English	3-3
SPAN 101-102	Basic Course in Spanish	3-3
HUMA 101-102	Study of Western Culture and Civilization I – II	3-3
SOSC 101-102	Introduction to Social Sciences I-II	3-3
MATH 101-102	Introduction to College Mathematics	3-3
COSC 101	Introduction to Computer Sciences	3
GESC 101	Fundamentals of General Sciences	4
<b>2. Core Courses</b>		
COSC 112	Microcomputer Application in Business	3
ACCO 111-112	Elementary Accounting I-II	4-4
ECON 121-122	Principles and Problems in Economics I-II	3-3
ENGL 213	Oral Communication and Report Writing	3
ENGL 214	Oral and Written Communication in English	3
MATH 133-134	Pre-Calculus I-II	3-3
MATH 230	Calculus I	4
SPAN 201-202	Business Spanish and Communication I-II	3-3
STAT 330	Statistical Analysis and Design	3
<b>3. Concentration Courses</b>		
COSC 204	C Language and Programming	3
COSC 207	Visual Basic	3
COSC 206	Data Base of Management	3
COSC 210	Operating Systems	3
COSC 260	Cobol Language and Programming I	3
COSC 272	Program Application Internet and Web Page	3
COSC 307	Systems Analysis and Design I	3
COSC 309	Data Structures	3
COSC 410	Artificial Intelligence	3
COSC 311	Telecommunication and Teleprocessing	3
COSC 415	Programming Language Procedural, Non Procedural and Fourth Generation	3
COSC 413	Computer Hardware and Software	3
COSC 419-420	Seminar I-I	3-3
COSC 231	Basic Principles of Repairment and Maintenance of Computer	3

**4. Elective Courses**

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HUMA 206	History of the United States	3
HUMA 209 – 210	History of Puerto Rico I – II	3-3
PSYC 101-102	Introduction to Psychology I-II	3-3
COSC 308	System Analysis and Design II	3
COSC 320	Computer Business Commercial Application	3
COSC 321	Computer Control and Audit	3
COSC 417	Decision Support and Expert System	3
COSC 221	Application of Computers in Education	3

**Total Credit Hours Required for Graduation** **130**