

Bachelor of Science in Computer Science

2014 - 2015 Catalog

The University of Texas-Pan American

This document provides a list of the UTPA courses required for the major and their equivalent UTRGV courses.

A significant number of courses have changed their course prefix, number, and title.

For any additional information, please visit the Academic Advising Center.

UTPA Courses	Course Equivalents at UTRGV
A – GENERAL EDUCATION CORE – 43 HOURS	
Natural Science – 6 hours	
<i>Must choose within BIOL, CHEM, or PHYS.</i>	
Mathematics – 3 hours	
MATH 1460 Calculus I (or MATH 1487 Honors) three-hour lecture	MATH 2413 Calculus I (or MATH 2487) three-hour lecture
Humanities	
Philosophy and Modern/Classical Language Literature – 3 hours	
PHIL 2393 Engineering Ethics	PHIL 2326 Professional Ethics: Engineering
B – MAJOR REQUIREMENTS – 47 HOURS (33 advanced)	
CSCI 1101 Introduction to Computer Science	CSCI 1101 Introduction to Computer Science
CSCI 1370/1170 Engineering Computer Science I and Lab	CSCI 1370/1170 Engineering Computer Science I and Lab
CSCI 2333 Computer Organization & Assembly Language	CSCI 2333 Computer Organization and Assembly Language
CSCI 2344 Programming in Unix/Linux	CSCI 2344 Programming in Unix/ Linux Environment
CSCI 2380 Computer Science II	CSCI 2380 Computer Science II
CSCI 3333 Algorithms and Data Structures	CSCI 3333 Algorithms and Data Structures
CSCI 3334 Systems Programming	CSCI 3334 Systems Programming
CSCI 3336 Organization of Programming Language	CSCI 3336 Organization of Programming Languages
CSCI 3340 Software Engineering I	CSCI 3340 Software Engineering I
CSCI 4325 Automata, Formal Language, and Compatibility	CSCI 4325 Automata, Formal Languages, and Computability
CSCI 4390 Senior Project	CSCI 4390 Senior Project
<i>Choose one:</i>	
CSCI 3326 OO Programming in JAVA	CSCI 3326 Object Oriented Programming in JAVA
CSCI 3327 OO Prog in Visual Basic	CSCI 3327 Object Oriented Programming in Visual Basic
CSCI 3328 Object-oriented Programming	CSCI 3328 Object-Oriented Programming In C#
<i>Choose two:</i>	
CSCI 4333 Database	CSCI 4333 Database Design and Implementation
CSCI 4334 Operating	CSCI 4334 Operating Systems
CSCI 4335 Architecture	CSCI 4335 Computer Architecture
CSCI 4345 Networking	CSCI 4345 Computer Networks
<i>Choose 6 hours of advanced Computer Science.</i>	
C – SUPPORT COURSES – 31 hours (12 advanced minimum)	
MATH 1460 Calculus I (or MATH 1487 Honors) one-hour lecture	MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
MATH 1470 Calculus II (or MATH 1488 Honors)	MATH 2414 Calculus II (or MATH 2488 Honors)
MATH 3345 Linear Algebra	MATH 2318 Linear Algebra
MATH 3373 Discrete Structures	MATH 2305 Discrete Mathematics
ELEE 2330/2130 Digital Systems Engineering	ELEE 2330/2130 Digital Systems Engineering I and Lab
COMM 1303 Speech	COMM 1315 Public Speaking
ENG 3333 Technical Writing	ENGL 3342 Technical Communication
<i>Choose one:</i>	
MATH 3337 Applied Statistics I	MATH 3331 Applied Statistics I
MATH 4339 Probability and Statistics	MATH 4337 Probability and Statistics I
ELEE 3340 Probability and Statistics or Applied Statistics	ELEE 3340 Probability and Statistics for Electrical Engineers
<i>Choose 4 hours of BIOL, CHEM, PHYS (both lecture and lab).</i>	
D – FREE ELECTIVES – 6 hours (2 advanced minimum)	

TOTAL CREDIT HOURS FOR GRADUATION – 127 HOURS

TOTAL ADVANCED HOURS – 51 HOURS