

TEXAS A & M UNIVERSITY-CORPUS CHRISTI  
 COLLEGE OF SCIENCE AND ENGINEERING  
 MASTER OF SCIENCE IN COMPUTER SCIENCE Catalog: 2020-2021

**COURSE OPTION**

**\*Students entering the program must have successfully completed the following preparatory coursework: In addition, students can take no more than 9 credits towards their degree prior to completing all leveling courses. All leveling must be completed with a grade of "B" or better. Students can take no more than 9 hours towards their degree prior to completing all preparatory courses.**

**CS Preparatory Coursework (pre-reqs in parentheses)      Grade**

COSC 1435 Problem Solving I (MATH)	_____
COSC 1436 Problem Solving II (COSC 1435)	_____
COSC 2334 Computer Architecture (COSC 1435 and MATH 2305)	_____
COSC 2437 Data Structures (COSC 1436 and MATH 2305)	_____
COSC3346 Operating Systems (COSC 2437 and COSC 2334)	_____

**MATH Preparatory Coursework**

MATH 2305 Discrete Math & MATH 2413 Calculus I	_____
Additional Junior level or higher mathematics course: example below	_____
(Linear Algebra, Numerical Analysis or Applied Probability & Stats)	_____

**CORE COURSES (9 Credit Hours)      Grade**

	Grade	Hrs	Term	Prerequisites
COSC 6334 Design and Analysis of Algorithms (FL/SP)	_____	3	_____	COSC 2437, MATH 2305
COSC 6351 Advanced Computer Architecture (FL/SP)	_____	3	_____	COSC 2437, COSC 3346 O/S
COSC 6352 Advanced Operating Systems (FL/SP)	_____	3	_____	COSC 2437,2334, 3346 O/S

**REQUIRED COURSE- Must be taken in last semester:**

COSC 6370 Advanced Software Engineering (FL/SP)	_____	3	_____
---	-------	---	-------

**ELECTIVES (Min 24 credit hours):**

**At least 6 credit hours from each concentration track below required:**

COSC APPROVED GRADUATE ELECTIVE (Choose from A. below)	_____	3	_____
COSC APPROVED GRADUATE ELECTIVE (Choose from A. below)	_____	3	_____
COSC APPROVED GRADUATE ELECTIVE (Choose from B. below)	_____	3	_____
COSC APPROVED GRADUATE ELECTIVE (Choose from B. below)	_____	3	_____
COSC APPROVED GRADUATE ELECTIVE (Choose from C. Below)	_____	3	_____
COSC APPROVED GRADUATE ELECTIVE (Choose from C. Below)	_____	3	_____
COSC APPROVED GRADUATE ELECTIVE	_____	3	_____
COSC APPROVED GRADUATE ELECTIVE	_____	3	_____
Total		36	

A: Software and Programming	B. Data Science	C. Cyber Science
COSC 6340 Human Computer Interaction	COSC 6324 Digital Image Processing	COSC 6355 Data Communications and Networking
COSC 6353 Compiler Design and Construction	COSC 6326 Computer Vision	COSC 6357 Wireless Sensor Networks
COSC 6356 Theory of Computation	COSC 6327 Introduction to Computer Graphics	COSC 6374 Computer Forensics
COSC 6360 Parallel Computing	COSC 6328 Advanced Computer Graphics	COSC 6375 Information Assurance
COSC 6361 Parallel Algorithms	COSC 6336 Database Management Systems	COSC 6376 Network Security
COSC 6362 Mobile Software Development	COSC 6337 Data Mining	COSC 6377 Applied Cryptography
COSC 6365 Current Trends in Programming	COSC 6338 Maching Learning	COSC 6379 Advanced Information Assurance
	COSC 6339 Deep Learning	
	COSC 6350 Advance Topics in DBMS	
	COSC 6354 Artificial Intelligence	
	COSC 6380 Data Analytics	
		Total Hours (min. 36): GPA (Min 3.0)
		Transfer hours (Max 12)
		Residency hours (Min 24)
		DIS hours (Max 6)

NOTE: Please refer to catalog for prerequisite courses for all approved electives. Students are responsible for having the specified pre-requisites prior to enrolling in graduate courses