

TEXAS A & M UNIVERSITY-CORPUS CHRISTI  
 COLLEGE OF SCIENCE AND ENGINEERING  
 MASTER OF SCIENCE IN COMPUTER SCIENCE 2019-2020  
**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-eqs in parentheses)**

	Grade	Hrs	Sem
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 1435 and COSC 2334)	_____	_____	_____

SAMPLE

**MATH Preparatory Coursework**

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

**CORE COURSES (9 Credit Hours)**

	Grade	Hrs	Sem
COSC 6334 Design and Analysis of Algorithms (FL/SP)	_____	3	_____
COSC 6351 Advanced Computer Architecture (FL/SP)	_____	3	_____
COSC 6352 Advance Operating Systems (FL/SP)	_____	3	_____

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

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

COSC 6340 Human Computer Interaction
COSC 6353 Compiler Design and Construction
COSC 6356 Theory of Computation
COSC 6360 Parallel Computing
COSC 6361 Parallel Algorithms
COSC 6362 Mobile Software Development
COSC 6365 Current Trends in Programming

**B. Data Science**

COSC 6324 Digital Image Processing
COSC 6326 Computer Vision
COSC 6327 Introduction to Computer Graphics
COSC 6328 Advanced Computer Graphics
COSC 6336 Database Management Systems
COSC 6337 Data Mining
COSC 6350 Advance Topics in DBMS
COSC 6354 Artificial Intelligence

**C. Cyber Science**

COSC 6355 Data Communications and Networking
COSC 6357 Wireless Sensor Networks
COSC 6374 Computer Forensics
COSC 6375 Information Assurance
COSC 6376 Network Security
COSC 6377 Applied Cryptography
COSC 6379 Advanced Information Assurance

Total Hours (min. 36):
GPA (Min 3.0)
Transfer hours (Max 12)
Residency hours (Min 24)
DIS hours (Max 6)