TEXAS A & M UNIVERSITY-CORPUS CHRISTI
COLLEGE OF SCIENCE AND ENGINEERING
MASTER OF SCIENCE IN COMPUTER SCIENCE  2019-2020

COURSE OPTION

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*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)

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<th>Grade</th>
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- 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)

### MATH Preparatory Coursework

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- 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)

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- COSC 6334 Design and Analysis of Algorithms (FL/SP)
- COSC 6351 Advanced Computer Architecture (FL/SP)
- COSC 6352 Advanced Operating Systems (FL/SP)

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

- COSC 6370 Advanced Software Engineering (FL/SP)
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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)
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- COSC APPROVED GRADUATE ELECTIVE (Choose from B. below)
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- COSC APPROVED GRADUATE ELECTIVE (Choose from C. Below)
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Total 36

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<thead>
<tr>
<th>A:  Software and Programming</th>
<th>B.  Data Science</th>
<th>C.  Cyber Science</th>
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<tr>
<td>COSC 6340 Human Computer Interaction</td>
<td>COSC 6324 Digital Image Processing</td>
<td>COSC 6355 Data Communications and Networking</td>
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<tr>
<td>COSC 6353 Compiler Design and Construction</td>
<td>COSC 6326 Computer Vision</td>
<td>COSC 6357 Wireless Sensor Networks</td>
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<tr>
<td>COSC 6356 Theory of Computation</td>
<td>COSC 6327 Introduction to Computer Graphics</td>
<td>COSC 6374 Computer Forensics</td>
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<td>COSC 6380 Parallel Computing</td>
<td>COSC 6328 Advanced Computer Graphics</td>
<td>COSC 6375 Information Assurance</td>
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<tr>
<td>COSC 6381 Parallel Algorithms</td>
<td>COSC 636 Database Management Systems</td>
<td>COSC 6376 Network Security</td>
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<tr>
<td>COSC 6382 Mobile Software Development</td>
<td>COSC 6337 Data Mining</td>
<td>COSC 6377 Applied Cryptography</td>
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<td>COSC 6385 Current Trends in Programming</td>
<td>COSC 6350 Advance Topics in DBMS</td>
<td>COSC 6379 Advanced Information Assurance</td>
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<td>COSC 6354 Artificial Intelligence</td>
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Total Hours (min. 36):

- GPA (Min 3.0)
- Transfer hours (Max 12)
- Residency hours (Min 24)
- DIS hours (Max 6)

Last revised date: 2/08/2018