

Texas A & M University-Corpus Christi

Curriculum Sheet for 2018-2019 Catalog

This Curriculum expires in 6 years.

*=Upper Division Hours

Degree: **Bachelor of Science**
 Major: **Computer Science**
 Option: **Cyber Security & Infrastructure**

<u>UNIVERSITY CORE CURRICULUM</u>		<u>SCH</u>	<u>PREREQUISITES</u>
ENGL 1302	Eng. Composition	3	
COMM 1311	Oral Communication	3	n/a
MATH 2413	Calculus I	(4)	MATH1314+1316 or MATH2312 or Placement
Natural Science	See catalog list	(4)	see catalog
Natural Science	See catalog list	(4)	see catalog
See Catalog	Language, Philosophy, or Culture	3	see catalog
HIST 1301	US History I	3	n/a
HIST 1302	US History II	3	n/a
POLS 2305	US GOVT	3	n/a
POLS 2306	TX GOVT	3	n/a
See Catalog	Creative Arts (see catalog)	3	see catalog
ECON 2301,ECON 2302,PSYC 2301, or SOCI1301	Social/Behavioral Sciences	3	n/a
Component Area Option (CAO):May select any core courses not being used to satisfy another core; able to use lab hours from a 4 hour core course for up to 3 hours of CAO, may take MATH 2414 to satisfy 4 hours of CAO.			6 See catalog for Core Curriculum
<u>Computer Science Core</u>			
COSC 1100	Skills for Computing Professional I	1	Co-requisite w/ COSC 1435
COSC 1435	<u>Intro to Problem Solving I w/lab</u>	4	MATH 1314
COSC 1436	<u>Intro to Problem Solving II w/lab</u>	4	COSC 1435
COSC 2334	<u>Computer Architecture</u>	3	COSC 1435 & MATH 2305
COSC 2437	<u>Data Structures w/lab</u>	4	COSC 1436 & Co-req MATH 2305
*COSC 3336	<u>Intro to Database Systems</u>	3	COSC 2437
*COSC 3346	<u>Operating Systems</u>	3	COSC 2437 & COSC 2334 or ENTC 3418
*COSC 3370	<u>Software Engineering</u>	3	COSC 2437
*COSC 4100	<u>Skills for Computing Professionals III</u>	1	COSC 1100 and ENGL 3310
*ENGL 3310	<u>Technical and Professional Writing for CS</u>	3	
*COSC 4342	<u>Computer Networks</u>	3	COSC 3346 & MATH 2413
*COSC 4354	<u>Senior Capstone</u>	3	COSC 3370 & 3336
MATH 2413	<u>Calculus I w/lab</u>	4	MATH 1314 + 1316 OR 2312
MATH 2305	<u>Discrete Mathematics I</u>	3	MATH 2312
*MATH 3342 or MATH 3345	<u>Applied Probability & Statistics or Statistical Modeling and Data Analysis</u>	3	MATH 2413; MATH 2414 & COSC 1435 (or COSC 1330)
<u>Courses Specific to Cyber Security & Infrastructure Option</u>			
COSC 2365	<u>Linux Systems</u>	3	COSC 1435
COSC 2366	<u>Network Systems</u>	3	COSC 1435 & COSC 2365
*COSC 3351	<u>Internet Programming</u>	3	Prereq/Coreq COSC 3336
*COSC 3365	<u>Cyber Defense I</u>	3	COSC 2365 & COSC 2366
*COSC 3366	<u>Network Security</u>	3	COSC 2366
*COSC 4365	<u>Windows Security</u>	3	COSC 2365
*COSC 4368	<u>Cyber Defense II</u>	3	COSC 2437, COSC 3365, COSC 3366, COSC 4365
<u>Approved Upper Division Computer Science Electives (15 hrs)</u>			
*COSC Upper Division Elective		3	see catalog
*COSC Upper Division Elective		3	see catalog
*COSC Upper Division Elective		3	see catalog
*COSC Upper Division Elective		3	see catalog
*COSC Upper Division Elective		3	see catalog
Electives as needed to fulfill university total hour			0-1 see catalog
<u>All COSC majors are required to meet with their assigned faculty mentor every fall. Contact the Academic Advisor for more information.</u>			
Program requirement:			
College Minimum major grade point average (g.p.a)		2.25	
University Requirements			
Minimum Total Hours for degree:		120	
*Upper Division minimum total hours:		45	
*Upper Division minimum residency hours:		36	
*Upper Division minimum major residency hrs:		12	
Cumulative TAMU-CC minimum g.p.a.:		2	
Foreign Language Requirement:		see catalog	