

Texas A & M University-Corpus Christi

Curriculum Sheet for 2019-2020 Catalog

This Curriculum expires in 6 years.

*=Upper Division Hours

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

UNIVERSITY CORE CURRICULUM

<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 SOC11301	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

Computer Science Core

COSC 1100	Skills for Computing Professional I	1	Co-requisite w/ COSC 1435
COSC 1435	Intro to Problem Solving I w/lab	4	MATH 1314
COSC 1436	Intro to Problem Solving II w/lab	4	COSC 1435
COSC 2334	Computer Architecture	3	COSC 1435 & MATH 2305
COSC 2437	Data Structures w/lab	4	COSC 1436 & Co-req MATH 2305
*COSC 3336	Intro to Database Systems	3	COSC 2437
*COSC 3346	Operating Systems	3	COSC 2437 & COSC 2334 or ENTC 3418
*COSC 3370	Software Engineering	3	COSC 2437
*COSC 4100	Skills for Computing Professionals III	1	COSC 1100 and ENGL 3310
*ENGL 3310	Technical and Professional Writing for CS	3	
*COSC 4354	Senior Capstone	3	COSC 3370 & 3336
MATH 2413	Calculus I w/lab	4	MATH 1314 + 1316 OR 2312
MATH 2305	Discrete Mathematics I	3	MATH 2312
*MATH 3342 or MATH 3345	Applied Probability & Statistics or Statistical Modeling and Data Analysis	3	MATH 2413; MATH 2414 & COSC 1435 (or COSC 1330)

Courses Specific to Cyber Security & Infrastructure Option

COSC 2348	Intro to Scripting	3	COSC 1435
COSC 2465	Linux Systems (fall)	4	COSC 1435
COSC 2466	Network Systems (spring)	4	COSC 1435 & COSC 2465
*COSC 3351	Internet Programming (fall/spring)	3	Prereq/Coreq COSC 3336
*COSC 3365	Cyber Defense I (fall)	3	COSC 2465 & COSC 2466
*COSC 3466	Network Security (spring)	4	COSC 2348, COSC 3365
*COSC 4310	Digital Forensics (fall odd)	3	COSC 2437
*COSC 4365	Windows Security (spring)	3	COSC 2465
*COSC 4367	Firewall and Intrusion Detection Systems (fall)	3	COSC 3466 Network Security
*COSC 4368	Cyber Defense II (Fall)	3	COSC 2437, COSC 3365, COSC 3466, COSC 4365

Approved Upper Division Computer Science Electives (6 hrs)

*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

All COSC majors are required to meet with their assigned faculty mentor every fall.

Program requirement: Contact the Academic Advisor for more information.

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