

Texas A & M University-Corpus Christi

Curriculum Sheet for 2019-2020 Catalog

This Curriculum expires in 6 years.

* Asterik Symbol = Upper Division Hours

+ Plus Symbol = Double counting core and major requirement

Degree: Bachelor of Science

Major: Computer Science

Option: Game Programming

COMMON UNIVERSITY CORE CURRICULUM

		SCH	PREREQUISITES
ENGL 1302	Eng. Composition	3	
COMM 1311	Oral Communication	3	n/a
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 SOCI 1301	Social/Behavioral Sciences	3	n/a

MAJOR SPECIFIC UNIVERSITY CORE CLASSES (See note below)

+MATH 2413	Calculus I	(4)	MATH 1314 & MATH 1316 or MATH 2312 Co-requisite SMTE Lab Safety Seminar Register by discipline (0 hrs)
+PHYS 2425	Natural Science	(4)	PHYS 2425 Co-requisite SMTE Lab Safety Seminar Register by discipline (0 hrs)
+PHYS 2426	Natural Science	(4)	MATH 2414
+CAO Option I	MATH 2414 Calculus II	(4)	MATH 2414
	Lab from Calculus I		
+CAO Option II	Lab from PHYS 2425 & PHYS 2426	(2)	see catalog

university core classes section will result in taking additional courses that may not be required to complete your degree. Please consult with your major academic advisor for more details.

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
*COSC 4354	Senior Capstone	3	COSC 3370 & 3336
*ENGL 3310	Technical and Professional Writing for CS	3	
MATH 2413	Calculus I w/ lab	4	MATH 1314 & 1316 OR 2312
MATH 2305	Discrete Mathematics I	3	MATH 2312
	Applied Probability & Statistics or Statistical Modeling and Data Analysis	3	MATH 2413

Courses Specific to Game Programming Option

COSC 2325	Game Design	3	None
COSC 2360	Cyber Security	3	COSC 1435
*COSC 3324	Object-Oriented Programming	3	COSC 2437
*COSC 3325	Game Programming	3	COSC 2437
			MATH 2413, COSC 1330 OR COSC 1435.
*COSC 3385	Numerical Methods	3	MATH 2414 and MATH 3311 Recommended.
			COSC 3325
*COSC 4325	Advanced Game Programming	3	COSC 2437 & MATH 2413
*COSC 4328	Computer Graphics	3	COSC 2437 & MATH 2305
*COSC 4330	Intro to Artificial Intelligence	3	COSC 3346 & MATH 2413
*COSC 4342	Computer Networks	3	COSC 2437 & MATH 2305 & MATH 2413
*COSC 4343	Algorithms	3	MATH 2413
MATH 2414	Calculus II	4	MATH 2413
*MATH 3311	Linear Algebra	3	MATH 2413
PHYS 2425	University Physics I	4	MATH 2413
PHYS 2426	University Physics II	4	MATH 2414
CS Upper division elective (3000/4000 level)		3	See catalog
	Choose one upper division course from:		
*COSC 4353 Compiler Construction OR			
*COSC 4360 Theory of Programming Languages OR		3	COSC 3353 & MATH 2305; COSC 2437; MATH 2305
*COSC 4370 Models of Computation			

Electives as needed to fulfill university graduation minimum requirements 0-1

All COSC majors are required to meet with their assigned faculty mentor every fall.
Contact the Academic Advisor for more information.

Program requirement:

College Minimum major grade point average (g.p.a)

2.25 All classes under the heading of Computer Science core & all COSC courses on degree plan.

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