CYBER ENGINEERING TECHNOLOGY, BACHELOR OF SCIENCE

Requirements

Code	Title	Credits
Core Curriculum		42
Departmental Requirements		7
University Requirements		4
Required Support Courses		18
Major Courses		28
Major Electives		9
Upper Division CSCI, CSEC, and/or ESET courses		12
Total Credits		**120**

- 30 CETE/CSCI/CISA upper-division hours required for this degree must be completed at A&M-SA to satisfy residency requirement.
- Must complete at least 40 hours of major courses and major electives at A&M-SA.
- Must receive a grade of "C" or better in all MATH, CSCI, CISA and CETE courses and their associated prerequisites for satisfactory passing grade.
- A minimum average GPA of 2.25 must be maintained in all CETE and CISA core and elective courses to remain in the program. Applies to transfer courses also.
- Academic credits transferred as substitution courses must be completed within previous five years of admission to A&M-SA.
- CIP Code: 15.1201

Department probation and withdrawal:

For all departmental students in the Department of Computing and Cyber Security (CCS), to avoid department probation or withdrawal, the minimum GPA requirement in all CCS department courses (hereby called DCGPA) is 2.25. Courses with prefix CSCI, CISA, CETE, CSEC are departmental courses.

A student majoring in any of these disciplines is a departmental student: BS Computer Science (BSCS), BS Cyber Engineering Technology (BS-CETE), BS Cyber Security (BS-CSEC), BBA-Computer Information Systems (general and IA track) (BBA-CIS), and Bachelor of Applied Arts and Sciences (general and IA track) (BAAS-IT/BAAS-IT-IA).

Department probation

After a departmental student has completed four departmental courses, if the DCGPA drops below 2.25, the student will be placed on a department probation that term. In order to get off of department probation, a student must bring their DCGPA to 2.25 or higher by the following term. If the student does not bring their DCGPA to a 2.25 in one semester or term, the student will then be placed on a department withdrawal. A student can be on probation a maximum of two times. After that, the student will be placed on department withdrawal instead of department probation.

Department withdrawal

A student who has been placed on department probation and earns the DCGPA below 2.25 will be placed on department withdrawal. Because it is the first withdrawal, the student will be required to complete a departmental appeal, submit a personal letter, and an academic success plan of action to bring the DCGPA to 2.25 or higher by the following term. The plan has to be approved by the department chair or a designee. If a student is unable to bring the DCGPA to 2.25 or higher in one semester, the student will be required to select another major out of the department. A student can be on withdrawal only once. A second withdrawal will require a student to select a major out of the department.

Mandatory requirements for students on department probation and withdrawal

1. Meet with an Academic Success Coach for coaching on appropriate tutoring, study habits, etc.
2. Meet with their academic advisors and faculty mentors to seek guidance on computing course and careers.
3. Not register for more than 9 hours of departmental courses in the semester following probation/withdrawal.

Code	Title	Credits
Core Curriculum [1]		
ENGL 1301	Composition I	3
ENGL 1302	Composition II	3
or ENGL 2311	Technical Writing	
MATH 1314	College Algebra	3
PHYS 2325	University Physics I	3
PHYS 2326	University Physics II	3
Language/Philosophy/Culture		3
Creative Arts		3
American History		3
American History		3
Government/Political Science		3
Government/Political Science		3
Social and Behavioral Science		3
MATH 2312	Pre-Calculus	3
MATH 2313	Calculus I	3
Subtotal:		42
Departmental Requirements		
MATH 2314	Calculus II	3
or MATH 3340	Linear Algebra with Appl	
MATH 2113	Calculus I Lab	1
MATH 2114	Calculus II Lab	1
PHYS 2125	University Physics Lab I	1
PHYS 2126	University Physics Lab II	1
Subtotal:		7
University Requirements		
UNIV 1301	First Year Seminar	3
CSCI 4101	Ethical Issues in Computing	1
Subtotal:		4
Required Support Courses		
CSCI 1436	Programming Fundamentals I	4
CSCI 1437	Programming Fundamentals II	4
CSCI 2436	Programming Fundamentals III	4
CISA 2306	Computer Networks	3
CSCI 2325	Computer Organization	3
Subtotal:		18

Major Courses		
CSCI 3321	Cyber Security	3
CISA 3325	Network Security	3
CSCI 3344	Computer Architecture	3
CISA 3351	Database Design & SQL	3
CETE 3370	Cloud Cmpt Infrastrctr Securit	3
CETE 4375	Wireless and Mobile Security	3
CETE 4380	Applied Cryptosystem	3
CETE 4385	Cyber Security Architecture	3
CETE 4481	Penetration Test Using Python	4
Subtotal:		28
Major Electives		
Select nine credits of the following:		9
CETE 4390	Cyber Physical System Security	
CETE 4392	Big Data Analytics & Security	
CETE 4394	Cyber Intelligence	
CETE 4396	Internship Cyber Engineer Tech	
Subtotal:		9
Required Upper Division CSCI, CSEC, and/or ESET courses		12
Total Credits		**120**

1 Other courses may satisfy core curriculum requirements. Courses listed under the core curriculum above are also specific degree requirements, and are recommended in the core to expedite degree completion.

Plan of Study

This suggested plan of study is intended to be used as a guide in conjunction with official degree requirements outlined in the catalog. While this plan demonstrates a course of study that covers eight semesters, each student's academic path is unique and your timeline may look different. Students should regularly consult with academic advisors as they plan their course schedules as course offerings may vary.

First Year		
First Semester		**Credits**
ENGL 1301	Composition I [1]	3
MATH 1314	College Algebra [1]	3
UNIV 1301	First Year Seminar	3
HIST 1301	US History to 1865 [1]	3
CSCI 1436	Programming Fundamentals I	4
	Credits	**16**
Second Semester		
ENGL 1302 or ENGL 2311	Composition II [1] or Technical Writing	3
MATH 2312	Pre-Calculus [1]	3
Creative Arts [1]		3
PHYS 2325	University Physics I [1]	3
CSCI 1437	Programming Fundamentals II	4
PHYS 2125	University Physics Lab I [1]	1
	Credits	**17**
Second Year		
First Semester		
GOVT 2305	Federal Government [1]	3
MATH 2313	Calculus I [1]	3
MATH 2113	Calculus I Lab [1]	1
HIST 1302	US History from 1865 [1]	3
CSCI 2325	Computer Organization	3
CSCI 2436	Programming Fundamentals III [1]	4
	Credits	**17**
Second Semester		
GOVT 2306	Texas Government [1]	3
PHYS 2326	University Physics II [1]	3
PHYS 2126	University Physics Lab II [1]	1
MATH 2314	Calculus II [1]	3
MATH 2114	Calculus II Lab [1]	1
CISA 2306	Computer Networks	3
	Credits	**14**
Third Year		
First Semester		
CSCI 3321	Cyber Security	3
CISA 3351	Database Design & SQL	3
CSCI 3344	Computer Architecture	3
Language/Philosophy/Culture [1]		3
	Credits	**12**
Second Semester		
CETE 3370	Cloud Cmpt Infrastrctr Securit	3
CISA 3325	Network Security	3
CETE 4481	Penetration Test Using Python	4
Upper Division CSCI, CSEC, and/or ESET course		3
Social and Behavioral Science		3
	Credits	**16**
Fourth Year		
First Semester		
CETE 4375	Wireless and Mobile Security	3
CETE 4380	Applied Cryptosystem	3
Upper Division CSCI, CSEC, and/or ESET course		3
Upper Division CSCI, CSEC, and/or ESET course		3
Major Elective		3
	Credits	**15**
Second Semester		
CETE 4385	Cyber Security Architecture	3
CSCI 4101	Ethical Issues in Computing	1
Upper Division CSCI, CSEC, and/or ESET course		3
Major Elective		3
Major Elective		3
	Credits	**13**
	Total Credits	**120**

[1] Course may be taken at a community college.