

# INFORMATION TECHNOLOGY/ INFORMATION ASSURANCE AND SECURITY CONCENTRATION, BACHELOR OF APPLIED ARTS AND SCIENCES

## Requirements

### General Requirements

Code	Title	Credits
	Core Curriculum	42
	Required Support Courses	12
	Technical/Vocational Credits	18-42
	IT Emphasis Area	36
	Electives	0-12
<b>Total Credits</b>		<b>120</b>

- The 36 upper-division hours required for this degree must be completed at A&M-SA to satisfy residency requirements.
- Must receive a grade of "C" or better in all MATH, CSCI, and CISA courses and their associated prerequisites for satisfactory passing grade.
- A minimum average GPA of 2.25 must be maintained in all CISA & CSCI core and elective courses to remain in program. Applies to transfer courses also.
- Academic courses cannot be counted towards technical/vocational credits.
- Technical/ vocational credits from non-approved colleges requires department chair and dean approval.
- Academic technical/vocational credits transferred as substitution courses must be completed within previous five years of admission to A&M-SA.
- CIP Code: 30.9999

### 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
<b>Core Curriculum <sup>1</sup></b>		
ENGL 1301	Composition I	3
ENGL 1302	Composition II	3
	or ENGL 2311 Technical Writing	
MATH 1342	Introductory Statistics	3
	Life & Physical Science	3
	Life & Physical Science	3
	Language /Philosophy/Culture	3
	Creative Arts	3
	American History	3
	American History	3
	Government/Political Science	3
	Government/Political Science	3
	Social & Behavioral Science	3
MATH 1314	College Algebra	3
	Component Option Course from Approved List	3
Subtotal:		42
<b>Required Support Courses</b>		
CSCI 1436	Programming Fundamentals I	4
	or CSEC 1436 Python Programming I with Lab	
CSCI 1437	Programming Fundamentals II	4
	or CSEC 1437 Python Programming II with Lab	
UNIV 1301	First Year Seminar	3
CISA 4101	Jag Tracks III: Cmptr Info Sys	1
	or CSEC 4101 Ethical Issues in Computing	
Subtotal:		12
<b>Technical/Vocational Credits</b>		
En bloc credits must be taken in the field of Information Technology 18-42 area.		

Subtotal:	18-42
<b>IT Emphasis Area</b>	
All courses below must be taken at A&M-SA	
BCOM 3304	Bus Communication 3
CISA 2306	Computer Networks 3
or CSEC 2306	Computer Networks
CISA 2356	Systems Analysis and Design 3
or CSEC 2356	Systems Analysis and Design
CISA 3309	Scripting Languages 3
or CSEC 3309	Scripting Languages
CISA 3321	Information Security 3
or CSEC 3321	Information Security
CISA 3351	Database Design & SQL 3
or CSEC 3351	Systems Analysis and Design
CISA 4358	Senior Project and Seminar 3
or CSEC 4358	Senior Project and Seminar
<i>Information Assurance &amp; Security Electives</i>	
CISA 3325	Network Security 3
or CSEC 3325	Network Security
CISA 4323	Computer Forensics 3
or CSEC 4323	Computer Forensics
CISA 4324	Security Risk Analysis 3
or CSEC 4324	Penetration Testing
CISA 4326	Security & Operation Practicum 3
or CSEC 4326	Security & Operation Practicum
Upper Division CISA, CSCI or CSEC Course	3
Subtotal:	36
<b>Electives</b>	
As needed to complete 120 credit hours required	0-12
<b>Total Credits</b>	<b>120</b>

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.*

<b>First Year</b>	
<b>First Semester</b>	
ENGL 1301	Composition I <sup>1</sup> 3
HIST 1301	US History to 1865 <sup>1</sup> 3
Life & Physical Science <sup>1</sup>	3
MATH 1314	College Algebra <sup>1</sup> 3
Social & Behavioral Science <sup>1</sup>	3
UNIV 1301	First Year Seminar 3
<b>Credits</b>	<b>18</b>

<b>Second Semester</b>	
ENGL 1302	Composition II <sup>1</sup> 3
or ENGL 2311	or Technical Writing
HIST 1302	US History from 1865 <sup>1</sup> 3
CSCI 1436	Programming Fundamentals I 4
or CSEC 1436	or Python Programming I with Lab
Life & Physical Science <sup>1</sup>	3
Creative Arts <sup>1</sup>	3
<b>Credits</b>	<b>16</b>

<b>Second Year</b>	
<b>First Semester</b>	
GOVT 2305	Federal Government <sup>1</sup> 3
MATH 1342	Introductory Statistics <sup>1</sup> 3
CSCI 1437	Programming Fundamentals II 4
or CSEC 1437	or Python Programming II with Lab
Language /Philosophy/Culture <sup>1</sup>	3
<b>Credits</b>	<b>13</b>

<b>Second Semester</b>	
GOVT 2306	Texas Government <sup>1</sup> 3
Component Option Course from Approved List <sup>1</sup>	3
Technical Vocational Credits <sup>1</sup>	3
Technical Vocational Credits <sup>1</sup>	3
Technical Vocational Credits <sup>1</sup>	3
<b>Credits</b>	<b>15</b>

<b>Third Year</b>	
<b>First Semester</b>	
Technical Vocational Credits <sup>1</sup>	3
Technical Vocational Credits <sup>1</sup>	3
Technical Vocational Credits <sup>1</sup>	3
Technical Vocational Credits <sup>1</sup>	3
Technical Vocational Credits <sup>1</sup>	3
<b>Credits</b>	<b>15</b>

<b>Second Semester</b>	
Technical Vocational Credits <sup>1</sup>	3
Technical Vocational Credits <sup>1</sup>	3
CISA 2306	Computer Networks 3
or CSEC 2306	or Computer Networks
BCOM 3304	Bus Communication 3
CISA 3309	Scripting Languages 3
or CSEC 3309	or Scripting Languages
<b>Credits</b>	<b>15</b>

<b>Fourth Year</b>	
<b>First Semester</b>	
CISA 2356	Systems Analysis and Design 3
or CSEC 2356	or Systems Analysis and Design
CISA 3351	Database Design & SQL 3
or CSEC 3351	or Systems Analysis and Design
CISA 3321	Information Security 3
or CSEC 3321	or Information Security
CISA 3325	Network Security 3
or CSEC 3325	or Network Security

CISA 4101 or CSEC 4101	Jag Tracks III: Cmpr Info Sys or Ethical Issues in Computing	1
<b>Credits</b>		<b>13</b>
<b>Second Semester</b>		
CISA 4326 or CSEC 4326	Security & Operation Practicum or Security & Operation Practicum	3
CISA 4358 or CSEC 4358	Senior Project and Seminar or Senior Project and Seminar	3
CISA 4323 or CSEC 4323	Computer Forensics or Computer Forensics	3
CISA 4324 or CSEC 4324	Security Risk Analysis or Penetration Testing	3
Upper Division CISA/CSCI/ CSEC Course		3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>120</b>

<sup>1</sup> Course may be taken at a community college.

<sup>2</sup> For transfer students, 40 hours of Major courses + Major electives from A&M-SA are required.