

IDN: \_\_\_\_\_ Printed Name: \_\_\_\_\_

**BS-Computer Science-Major Code: 1044**

Concentration Codes: C037 CyberSecurity \_\_\_\_\_ C039 General \_\_\_\_\_ C051 Data Science and Artificial intelligence \_\_\_\_\_

This degree is available in a guaranteed 8-semester plan for qualified freshmen. **See your advisor to declare your major and sign an official degree plan.**  
*The prerequisites and corequisites of the degree requirements are subject to change.*

MATH/ENGL prerequisite/co-requisite courses if student does not meet placement requirements:

**Prerequisites:** MATH 0304 \_\_\_\_\_ **Corequisites:** ENGL 0201 \_\_\_\_\_ ENGL 0202 \_\_\_\_\_ MATH 0301 \_\_\_\_\_ MATH 0201 \_\_\_\_\_

**FRESHMAN YEAR- FALL SEMESTER: 14 hours**

**Courses**

English composition requirement	3 Hours	Note 1	Grade _____
MATH 2804 Calculus I	4 Hours		Grade _____
CS 1093 Computer Science Concepts	3 Hours	Note 2 & 4	Grade _____
Fine Arts/Humanities/Social Sciences requirement	3 Hours	Note 1	Grade _____
STEM 1001 College Prep for STEM Majors	1 Hour		Grade _____

**FRESHMAN YEAR- SPRING SEMESTER: 15 hours**

**Courses**

English composition requirement	3 Hours	Note 1	Grade _____
MATH 2854 Calculus II	4 Hours		Grade _____
CS 1014 Foundations of Programming I	4 Hours	Note 2 & 4	Grade _____
CS 1044 Foundations of Networking	4 Hours	Note 2 & 4	Grade _____

**SOPHOMORE YEAR- FALL SEMESTER: 15 hours**

**Courses**

Lab Science requirement	4 Hours	Note 1	Grade _____
CS 2053 Foundations of CyberSecurity	3 Hours	Note 2 & 4	Grade _____
CS 1024 Foundations of Programming II	4 Hours	Note 2 & 4	Grade _____
CS (1000-2000) Lower-Level Elective	3 Hours	Note 2 & 3	Grade _____
FIN 1521 Personal Finance Applications	1 Hours	Note 6	Grade _____

**SOPHOMORE YEAR- SPRING SEMESTER: 16 hours**

**Courses**

Lab Science requirement	4 Hours	Note 1	Grade _____
MATH 2443 Discrete Mathematics I	3 Hours		Grade _____
CS 2033 Web Systems	3 Hours	Note 2 & 4	Grade _____
CS 2003 Data Structures	3 Hours	Note 2 & 4	Grade _____
SPCH 1203 Intro to Speech Communication	3 Hours		Grade _____

**JUNIOR YEAR- FALL SEMESTER: 15 hours**

**Courses**

MATH 3303 Discrete Mathematics II	3 Hours		Grade _____
CS 3033 Computer Architecture	3 Hours	Note 2 & 4	Grade _____
CS 3043 Database Systems	3 Hours	Note 2 & 4	Grade _____
CS 3103 Algorithms	3 Hours	Note 2 & 4	Grade _____
Concentration requirement or CS/MATH/STAT elective	3 Hours	Note 2 & 3	Grade _____

**JUNIOR YEAR- SPRING SEMESTER: 15 hours**

**Courses**

CS 3003 Distributed Systems	3 Hours	Note 2 & 4	Grade _____
CS 3053 Operating Systems	3 Hours	Note 2 & 4	Grade _____
CS 3113 Artificial Intelligence	3 Hours	Note 2 & 4	Grade _____
Fine Arts/Humanities/Social Sciences requirement	3 Hours	Note 1	Grade _____
Concentration requirement or CS/MATH/STAT elective	3 Hours	Note 2 & 3	Grade _____

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**SENIOR YEAR- FALL SEMESTER: 15 hours**

**Courses**

Fine Arts/Humanities/Social Sciences requirement	3 Hours	Note 1	Grade _____
CS 4003 Software Engineering	3 Hours	Note 2 & 4	Grade _____
CS 4033 Ethics and Professional Practice	3 Hours	Note 2 & 4	Grade _____
History/Government Requirement	3 Hours	Note 1	Grade _____
Concentration requirement or CS/MATH/STAT elective	3 Hours	Note 2 & 3	Grade _____

**SENIOR YEAR- SPRING SEMESTER: 15 hours**

**Courses**

Fine Arts/Humanities/Social Sciences requirement	3 Hours	Note 1	Grade _____
Concentration requirement or CS/MATH/STAT elective	3 Hours	Note 2 & 3	Grade _____
CS 4023 Senior Capstone	3 Hours	Note 2 & 4	Grade _____
CS 4043 Formal Languages	3 Hours	Note 2 & 4	Grade _____
MATH/STAT Upper-level elective	3 Hours	Note 5	Grade _____

**Total Hours: 120 At least 40 hours must be upper-level**

**NOTES**

1. General Education Core requirements, see below on the last page. Follow requirements with the following stipulations: lab science – select two from the following: GEOL 1253/1251 Physical Geology/Lab, CHEM 1403/1401 College Chemistry I/Lab, CHEM 1413/1411 College Chemistry II/Lab, PHYS 2903/2911 University Physics I/Lab, PHYS 2923/2931 University Physics II/Lab.
2. These courses are used to determine major courses in residency, see Graduation Requirements section of this catalog.
3. Select one concentration of nine hours, one CS lower-level elective, and one CS/MATH/STAT upper-level elective with approval from advisor.
4. Requires a grade of C or higher.
5. Select a MATH/STAT upper-level elective course with advisor approval.
6. Prior to graduation students must demonstrate competency in financial literacy by satisfactory completion of FIN 1521 Personal Finance Applications (or an approved substitution) with a grade of C or better, or by a score of 70% or more on a challenge exam for FIN 1521.

**Depending on the Concentration you choose see below for course choices:**

**CyberSecurity C037**

Select three courses from the following:

**Courses**

CS 3513 Applied Cryptography	3 Hours	Note 2	Grade _____
CS 3523 Computer Forensics	3 Hours	Note 2	Grade _____
CS 4213 Identity Management	3 Hours	Note 2	Grade _____
CS 4503 CyberOps	3 Hours	Note 2	Grade _____
CS 4523 Cyber Crimes	3 Hours	Note 2	Grade _____

**General C039**

**Courses**

Select any three upper-level CS elective courses with advisor approval.	9 Hours	Note 2	Grade _____
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**Data Science and Artificial Intelligence C051**

Select three courses from the following:

**Courses**

CS 3323 Computer Graphics	3 Hours	Note 2	Grade _____
CS 3333 Big Data	3 Hours	Note 2	Grade _____
CS 4143 Deep Learning	3 Hours	Note 2	Grade _____
CS 4153 Advanced Algorithms	3 Hours	Note 2	Grade _____
CS 4323 Data Analytics	3 Hours	Note 2	Grade _____
CS 4333 Machine Learning	3 Hours	Note 2	Grade _____
CS 4343 Natural Language Processing	3 Hours	Note 2	Grade _____
CS 4363 Internet of Things Development	3 Hours	Note 2	Grade _____
CS 4373 Information Retrieval	3 Hours	Note 2	Grade _____

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**Transfer Course Information**

The Arkansas Course Transfer System (ACTS) contains information about the transferability of courses within Arkansas public colleges and universities. Students are guaranteed the transfer of applicable credits and the equitable treatment of the application of credits for the admissions and degree requirements. Courses transferability is not guaranteed for courses listed in ACTS as "No Comparable Courses." ACTS-Arkansas Course Transfer System <http://acts.adhe.edu> -select Course Transfer. See Acceptance of Transfer Credits section of the current academic catalog for a complete list of transfer provisions.

**Student Degree Program Requirements**

A student's degree program requirements are those specified in the catalog in effect at the time of declaration of program major. If not on the Guaranteed 8-semester degree plan, students may choose to meet the program requirements specified in the catalog for a later year from when they began their program of study. Students must meet the above program requirements and the graduation requirements as indicated by institutional and college policy. The program can be changed only with the approval of the official advisor.

If original courses are eliminated, students may be required to meet new curriculum requirements in the degree program. If students are not enrolled for two or more consecutive terms (excluding summer terms), they must re-enter under the program requirements of the current catalog. Students are responsible for understanding program requirements and changes.

Guaranteed 8-Semester Degree Completion Program Pursuant to Act 1014 of 2005, qualified first-time freshmen with a declared major may elect to participate in the guaranteed 8-semester degree completion program. Students must follow the above degree plan and meet all requirements as outlined in the Guaranteed 8-semester Degree Completion Program contract. The contract and this degree plan must be signed and filed with the advisor before the first day of classes for the student's first term of attendance. The official copy of the contract and degree plan are filed in the Records Office.

Approved by Dr. Georgia Hale, March 1, 2020-Catalog Year 2020-2021. This document is not official until signed and dated by both the student and an authorized university representative.

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

Advisor Signature \_\_\_\_\_ Date \_\_\_\_\_

**UAFS General Education Core Requirements (Your degree plan may have specific requirements that are listed above.)**

<p><b>English Composition – one of the following sequences required</b>                  ENGL 1203 Composition I                  ENGL 1213 Composition II                  OR                  ENGL 1233 Honors Composition                  RHET 2863 Advanced Composition</p>
<p><b>Mathematics – one course required</b>                  MATH 1303 College Mathematics and Quantitative Literacy                  MATH 1403 College Algebra                  MATH with MATH 1403 as a prerequisite</p>
<p><b>Fine Arts – one course required</b>                  AHIS 2863 Survey of Art History I                  AHIS 2873 Survey of Art History II                  HUMN 2563 Humanities Through the Arts                  HUMN 2663 Intro to Film                  MUSI 2763 Music Appreciation                  ENGL 2853 Intro to Creative Writing</p>
<p><b>History/Government – one course required</b>                  HIST 2753 US History I                  HIST 2763 US History II                  POLS 2753 American National Government</p>

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<p><b>Humanities – one course required</b>                  ENGL 2013 Intro to Global Literature                  ENGL 2023 Intro to American Literature                  PHIL 2753 Intro to Philosophy                  RELI 2303 World Religions                  Any 2000 level intermediate world language</p>																					
<p><b>Social Sciences – two courses, from different areas</b>                  ANTH 2803 Cultural Anthropology                  CJ 1013 Intro Criminal Justice System                  ECON 2803 Principles of Macroeconomics <b>or</b>                  ECON 2813 Principles of Microeconomics                  GEOG 2753 World Regional Geography <b>or</b>                  GEOG 2773 Human Geography                  HIST 1123 Civilizations of the World to 1500 <b>or</b>                  HIST 1133 Civilizations of the World since 1500                  HIST 2753 US History I* <b>or</b>                  HIST 2763 US History II*                  POLS 2753 American National Government*                  PSYC 1163 General Psychology                  SOCI 2753 Introduction to Sociology  <i><b>*If not used to meet History/ Government requirement (a course may only be used once)</b></i></p>																					
<p><b>Lab Science – two lecture/lab combinations required</b></p> <table border="0"> <tr> <td>BIOL 1153/1151 Biological Science/Lab</td> <td>PHSC 2653/2651 Earth Science/Lab</td> </tr> <tr> <td>BIOL 2203/2201 Human Anatomy/Lab</td> <td>PHSC 2713/2711 Physical Science/Lab</td> </tr> <tr> <td>BIOL 2213/2211 Human Physiology/Lab</td> <td>PHYS 2803/2811 College Physics I/Lab</td> </tr> <tr> <td>BIOL 2303/2301 General Botany/Lab</td> <td>PHYS 2823/2831 College Physics II/Lab</td> </tr> <tr> <td>BIOL 2503/2501 General Microbiology/Lab</td> <td>PHYS 2903/2911 University Physics I/Lab</td> </tr> <tr> <td>BIOL 2703/2701 General Zoology/Lab</td> <td>PHYS 2923/2931 University Physics II/Lab</td> </tr> <tr> <td>CHEM 1303/1301 Chemical Principles/Lab</td> <td>PHSC 2503/2501 Fundamentals of Astronomy/Lab</td> </tr> <tr> <td>CHEM 1403/1401 College Chemistry I/Lab</td> <td></td> </tr> <tr> <td>CHEM 1413/1411 College Chemistry II/Lab</td> <td></td> </tr> <tr> <td>GEOL 1253/1251 Physical Geology/Lab</td> <td></td> </tr> </table>		BIOL 1153/1151 Biological Science/Lab	PHSC 2653/2651 Earth Science/Lab	BIOL 2203/2201 Human Anatomy/Lab	PHSC 2713/2711 Physical Science/Lab	BIOL 2213/2211 Human Physiology/Lab	PHYS 2803/2811 College Physics I/Lab	BIOL 2303/2301 General Botany/Lab	PHYS 2823/2831 College Physics II/Lab	BIOL 2503/2501 General Microbiology/Lab	PHYS 2903/2911 University Physics I/Lab	BIOL 2703/2701 General Zoology/Lab	PHYS 2923/2931 University Physics II/Lab	CHEM 1303/1301 Chemical Principles/Lab	PHSC 2503/2501 Fundamentals of Astronomy/Lab	CHEM 1403/1401 College Chemistry I/Lab		CHEM 1413/1411 College Chemistry II/Lab		GEOL 1253/1251 Physical Geology/Lab	
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