IDN: _____ Printed Name: _____

BS-Information Technology-Major Code: 1044

Concentration Codes: C033 Programming_____ C034 Networking_____ C037 Security_____ C039 General_____ C051 Data Analytics_____

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: ENGL0263 _____ MATH 0233_____MATH 0304 _____ **Corequisites:** ENGL 0201_____ MATH 0301 _____

FRESHMAN YEAR- FALL SEMESTER: 16 hours

Courses

English composition requirement	3 Hours	Note 1	Grade_____
MATH 2804 Calculus I	4 Hours		Grade_____
CS 1044 Foundations of Networking	4 Hours	Note 2	Grade_____
CS 1014 Foundations of Programming I	4 Hours	Note 2	Grade_____
STEM 1001 College Prep for STEM Majors	1 Hour		Grade_____

FRESHMAN YEAR- SPRING SEMESTER: 15 hours

Courses

CS 1024 Foundations of Programming II	4 Hours	Note 2	Grade_____
CS 1033 Foundations of Operating Systems I	3 Hours	Note 2	Grade_____
CS 2022 IT Systems Management	2 Hours	Note 2	Grade_____
SPCH 1203 Intro to Speech Communication	3 Hours		Grade_____
English composition requirement	3 Hours	Note 1	Grade_____

SOPHOMORE YEAR- FALL SEMESTER: 16 hours

Courses

CS 1063 Foundations of Operating Systems II	3 Hours	Note 2	Grade_____
CS 2003 Data Structures	3 Hours	Note 2	Grade_____
CS 2013 Database Systems I	3 Hours	Note 2	Grade_____
MATH 1903 Introductory Discrete Math	3 Hours		Grade_____
Lab Science requirement	4 Hours	Note 1	Grade_____

SOPHOMORE YEAR- SPRING SEMESTER: 16 hours

Courses

CS 2033 Web Systems	3 Hours	Note 2	Grade_____
CS 2043 Database Systems II	3 Hours	Note 2	Grade_____
STAT 2503 Probability and Statistics I or MATH 2854 Calculus II	3 Hours	Note 5	Grade_____
Lab Science requirement	4 Hours	Note 1	Grade_____
Fine Arts/Humanities/Social Sciences requirement	3 Hours	Note 1	Grade_____

JUNIOR YEAR- FALL SEMESTER: 15 hours

Courses

CS 3003 Distributed Systems	3 Hours	Note 2	Grade_____
CS 3503 IT Security	3 Hours	Note 2	Grade_____
CS 3103 Algorithm Design or CS 3223 Routing and Switching	3 Hours	Note 2	Grade_____
Concentration requirement/CS elective	3 Hours	Note 2 & 3	Grade_____
History/Government Requirement	3 Hours	Note 1	Grade_____

JUNIOR YEAR- SPRING SEMESTER: 15 hours

Courses

CS 3013 Human Computer Interaction	3 Hours	Note 2	Grade_____
CS 3023 Research Methods in Information Tech	3 Hours	Note 2	Grade_____
CS 3113 Artificial Intelligence or			

IDN: _____ Printed Name: _____

CS 4213 Identity Management	3 Hours	Note 2	Grade_____
Concentration requirement/CS elective	3 Hours	Note 2 & 3	Grade_____
Fine Arts/Humanities/Social Sciences requirement	3 Hours	Note 1	Grade_____

SENIOR YEAR- FALL SEMESTER: 15 hours

Courses

CS 3033 Computer Architecture	3 Hours	Note 2	Grade_____
CS 4003 Systems Analysis and Design	3 Hours	Note 2	Grade_____
Concentration requirement/CS elective	3 Hours	Note 2 & 3	Grade_____
Concentration requirement/CS elective	3 Hours	Note 2 & 3	Grade_____
Fine Arts/Humanities/Social Sciences requirement	3 Hours	Note 1	Grade_____

SENIOR YEAR- SPRING SEMESTER: 12 hours

Courses

CS 4023 Senior Capstone	3 Hours	Note 2 & 4	Grade_____
Concentration requirement/CS elective	3 Hours	Note 2 & 3	Grade_____
Concentration requirement/CS elective	3 Hours	Note 2 & 3	Grade_____
Fine Arts/Humanities/Social Sciences requirement	3 Hours	Note 1	Grade_____

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

NOTES

1. General Education Core requirements, see below on the last page.
2. These courses are used to determine major courses in residency, see Graduation Requirements section of this catalog.
3. Concentrations/CS Electives, 18 hours. Select two nine-hour concentrations, or one nine-hour concentration and nine hours of upper-level CS electives, or the data analytics concentration for 18 hours, or the general concentration with eighteen upper-level CS elective hours with approval from advisor.
4. Requires a grade of C or higher.
5. Consult with advisor to select either STAT 2503 or MATH 2854.

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:

Programing C033

Select three courses from the following:

Courses

CS 3123 Business Application Programming I	3 Hours	Note 2	Grade_____
CS 3133 Business Application Programming II	3 Hours	Note 2	Grade_____
CS 3143 Game Design and Development	3 Hours	Note 2	Grade_____
CS 3403 .Net Application Programming	3 Hours	Note 2	Grade_____
CS 3533 Assembly Language Programming	3 Hours	Note 2	Grade_____
CS 3543 Systems Programming	3 Hours	Note 2	Grade_____
CS 4103 Mobile Application Development	3 Hours	Note 2	Grade_____
CS 4133 Cloud Application Development	3 Hours	Note 2	Grade_____
CS 4143 Advanced Artificial Intelligence	3 Hours	Note 2	Grade_____
CS 4153 Advanced Algorithms	3 Hours	Note 2	Grade_____
CS 4933 Competitive Programming	3 Hours	Note 2	Grade_____

Networking C034

Select three courses from the following:

Courses

CS 3233 Network Services	3 Hours	Note 2	Grade_____
CS 4223 Computing at Scale	3 Hours	Note 2	Grade_____
CS 4233 Advanced Routing	3 Hours	Note 2	Grade_____
CS 4503 Network Security	3 Hours	Note 2	Grade_____

IDN: _____ Printed Name: _____

Security 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 3543 Systems Programming	3 Hours	Note 2	Grade_____
CS 4503 Network Security	3 Hours	Note 2	Grade_____
CS 4523 Cyber Crimes	3 Hours	Note 2	Grade_____

General C039

Courses

Select any six upper-level CS elective courses with advisor approval.	18 Hours	Note 2	Grade_____

Data Analytics C051
Select six courses from the following:

Courses

CS 3323 Computer Graphics	3 Hours	Note 2	Grade_____
CS 3333 Big Data	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 4933 Competitive Programming	3 Hours	Note 2	Grade_____
STAT 3503 Mathematical Statistics I	3 Hours	Note 2	Grade_____
MATH 3203 Applied Linear Algebra	3 Hours	Note 2	Grade_____
MATH 4443 Combinatorics	3 Hours	Note 2	Grade_____

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, 2019-Catalog Year 2019-2020. This document is not official until signed and dated by both the student and an authorized university representative.

Student Signature _____ Date _____

Advisor Signature _____ Date _____

IDN: _____ Printed Name: _____

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

English Composition – one of the following sequences required
ENGL 1203 Composition I
ENGL 1213 Composition II
OR
ENGL 1233 Honors Composition
RHET 2863 Advanced Composition

Mathematics – one course required
MATH 1303 College Mathematics and Quantitative Literacy
MATH 1403 College Algebra
MATH with MATH 1403 as a prerequisite

Fine Arts – one course required
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

History/Government – one course required
HIST 2753 US History I
HIST 2763 US History II
POLS 2753 American National Government

Humanities – one course required
ENGL 2013 Intro to Global Literature
ENGL 2023 Intro to American Literature
PHIL 2753 Intro to Philosophy
RELI 2303 World Religions

Social Sciences – two courses, from different areas
ANTH 2803 Cultural Anthropology
ECON 2803 Principles of Macroeconomics **or**
ECON 2813 Principles of Microeconomics
GEOG 2753 World Regional Geography **or**
GEOG 2773 Human Geography
HIST 1123 Civilizations of the World to 1500 **or**
HIST 1133 Civilizations of the World since 1500
HIST 2753 US History I*** or**
HIST 2763 US History II*****
POLS 2753 American National Government*****
PSYC 1163 General Psychology
SOCI 2753 Introduction to Sociology
****If not used to meet History/ Government requirement (a course may only be used once)***

Lab Science – two lecture/lab combinations required
BIOL 1153/1151 Biological Science/Lab
BIOL 2203/2201 Human Anatomy/Lab
BIOL 2213/2211 Human Physiology/Lab
BIOL 2303/2301 General Botany/Lab
BIOL 2503/2501 General Microbiology/Lab
BIOL 2703/2701 General Zoology/Lab
CHEM 1303/1301 Chemical Principles/Lab
CHEM 1403/1401 College Chemistry I/Lab
CHEM 1413/1411 College Chemistry II/Lab
GEOL 1253/1251 Physical Geology/Lab
PHSC 2503/2501 Fundamentals of Astronomy/Lab
PHSC 2653/2651 Earth Science/Lab
PHSC 2713/2711 Physical Science/Lab
PHYS 2803/2811 College Physics I/Lab
PHYS 2823/2831 College Physics II/Lab
PHYS 2903/2911 University Physics I/Lab
PHYS 2923/2931 University Physics II/Lab