ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Computer and Information Science	6/15/21

Title	Signature	Date
Department Head **Dr. Jerry Wood**	Jerry Wood	6-30-2021
Dean **Dr. Judy Cezeaux**	Judy L Cezeaux	6/30/2021
Assessment **Dr. Christine Austin**	Christi Austin	7.9.2021
Registrar **Mrs. Tammy Weaver**	Tammy Weaver	9/13/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs **Dr. Barbara Johnson**		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only) Yvonne	9/28/21
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Associate of Applied Science in Information Technology

Outline change in program: (e.g., list changes in program such as (1) delete three hours of elective and (2) add three hours of approved major electives)

1. Delete the following courses:
   COMS 1403 Orientation to Computing, Information, and Technology;
   COMS 1411 Computer and Information Science Lab;
   COMS 2003 Microcomputer Applications;
   COMS 2104 Foundations of Computer Programming I;
   COMS 2233 Introduction to Databases; and
   COMS 2701 Computer Architecture and Networks Laboratory;
2. Add the following courses:
   COMS 1013 Programming I;
   COMS 1011 Programming I lab;
   COMS 2713 Survey of Operating Systems;
   CSEC 1113 Introduction to Networking; and
   CSEC 2213 Network Forensics and Incident Response;
3. Allow any higher-level MATH course as a substitution for MATH 1113; add text "or higher-level Mathematics" so that entry reads: MATH 1113 College Algebra or higher-level Mathematics
4. Delete 12 hours above 1000 level COMS Electives; and delete footnote: 1000-level courses may not be used to satisfy this requirement;
5. Delete PHSC 1013 Introduction to Physical Science and PHSC 1021 Physical Science Laboratory;
6. Allow any science with lab to fulfill the science with lab requirement; add footnote 1: See appropriate alternatives or substitutions in General Education Requirements;
7. Allow TECH 1013 as a substitution for TECH 1001; add footnote 2: TECH 1013 Principles of Collegiate Success is a substitution for TECH 1001 Orientation to the University; Electives would reduce from 15 hour to 13 hours;
8. Allow COMS 3703 as a substitution for COMS 2713; add footnote 3: COMS 3703 Operating systems is a substitution for COMS 2713 Survey of Operating Systems;
9. Allow COMM 2003 as a substitution for COMM 2173; add footnote 4: COMM 2003 Public Speaking is a substitution for COMM 2173 Business and Professional Speaking; and
10. Change Electives from 2 hours to 15 hours and add footnote 5: Students seeking a Bachelor's degree in computing should take courses that count towards that degree rather than just general electives

What impact will the change have on staffing, on other programs and space allocation?
No anticipated impact

Answer the following Assessment questions:

a. How does the program change align with the university mission?
   Updating this curriculum will allow the university and our students to remain competitive in the field of IT. In addition, this revised AASIT has been built into the Bachelor's degrees of Information Technology, Computer Science, and Computer Science Education, giving every student in these programs the ability to earn both a 2-year and a 4-year degree.

b. If this change in the program is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable.
   n/a

c. What is the rationale for this program change?
   Changes to this degree were necessary to ensure that students receive at least one course in each major computing area so that they are prepared for an entry-level job in the IT

field. Having the AASIT built into both (proposed new) tracks of the BS in IT, BS in CS, and BS in CSED will not only allow ATU to grant more degrees, but will also benefit students who do not finish a BS degree.
Or **will allow ATU to grant more degrees and will benefit students who do not finish a BS degree.**
Which one?

1. How will the program change impact learning for students enrolled in this program?
   The proposed changes will allow students a broad body of knowledge in the field of IT, which will benefit them as they pursue entry-level employment, internships, and their upper-level courses.

2. Provide an example or examples of student learning assessment evidence which supports the changes in the program.
   n/a

d. How does this program fit in the current state of the discipline? Include Arkansas institutional comparisons. If Arkansas educational institutions do not have the course or program provide comparative examples from regional educational institutions.
There are several institutions in AR that offer an AS or AAS in Information Technology (IT) or Computer Information Technology (CIT):
   - **ASU Jonesboro offers an AS in CIT, CIP 52.1201**
   - **U of A eVersity offers both an AS and AAS in IT, CIP 11.0101**
   - **Black River Technical College offers AAS in CIT, CIP 11.0901**
   - **SouthArk Community College offers AAS in CIT, CIP 11.0801**
   - **U A Community College at Hope/Texarkana offers AAS in IT, CIP 11.0101**

Even though several institutions in the state offer a comparable 2-year degree, this degree is greatly needed throughout the state. In addition, this degree contains all of the foundational courses for the 4-year computing degrees at ATU.

e. Attach a detailed assessment plan including three to five specific program student learning outcomes, means or instructional measures to assess each outcome, identify program courses where learning will be assessed, and performance standards or criteria for success which demonstrate student learning for each outcome. (Examples for assessment plans/curriculum mapping can be found at the Office of Assessment and Institutional Effectiveness web page.)
See Appendix A.

If this course will affect other departments, a Departmental Support Form for each affected department must be attached. The form is located on the Curriculum forms web page at http://www.atu.edu/registrar/curriculum_forms.php.
Departmental support forms for all changes included in this packet (for all computing degrees) can be found at the back of the packet.

In the attached matrix, include requested changes in the matrix and include course number and title.

<table>
<tr><td colspan="2">Curriculum Matrix for Catalog
Curriculum in Associate of Applied Science in Information Technology</td></tr>
<tr><td>Freshman Fall Semester

Add/Change:
• COMS 1333 Web and Mobile Technologies
• CSEC 1113 Introduction to Networking
• Change: MATH 1113 College Algebra; add "or any higher-level Mathematics"
• TECH 1001 Orientation to the University - add footnote 2: TECH 1013 Principles of Collegiate Success can be substituted for TECH 1001 Orientation to the University.

Delete:
• COMS 1403 Orientation to Computing, Information, and Technology
• COMS 1411 Computer and Information Science Lab
• COMS 2003 Microcomputer Applications

Total Hours: 16</td><td>Freshman Spring Semester

Add/Change:
• COMS 1013 Programming I
• COMS 1011 Programming I lab
• COMS 2703 Computer Hardware and Architecture
• COMS 2713 Survey of Operating Systems- add footnote 3: COMS 3703 Operating Systems is a substitution for COMS 2713 Survey of Operating Systems.
• Change: Elective (2 hours) to Elective (3 hours) - add footnote 5: Students seeking a Bachelor's degree in computing should take courses that count towards that degree rather than just general electives.

Delete:
• COMS 1333 Web Publishing I
• COMS 2104 Foundations of Computer Programming I
• COMS 2233 Introduction to Databases

Total Hours: 16</td></tr>
<tr><td>Sophomore Fall Semester

Add/Change:
• Science with lab - add footnote 1: See appropriate alternatives or substitutions in General Education Requirements.
• CSEC 2213 Network Forensics and Incident Response
• Change course name of COMS 2203 "Foundations of Computer Programming II" to "Programming II"
• Elective (6 hours) - add footnote 5: Students seeking a Bachelor's degree in computing should take courses that count towards that degree rather than just general electives.

Delete:
• PHSC 1013 Introduction to Physical Science
• PHSC 1021 Physical Science Laboratory
• ENGL 2053 Technical Writing
• COMS 2703 Computer Networks and Architecture
• COMS 2701 Computer Architecture and Networks Laboratory
• COMS Elective

Total Hours: 16</td><td>Sophomore Spring Semester

Add/Change:
• COMM 2173 Business and Professional Speaking; add footnote 4: COMM 2003 Public Speaking is a substitution for COMM 2173 Business and Professional Speaking.
• ENGL 2053 Technical Writing
• Elective (6 hours) - add footnote 5: Students seeking a Bachelor's degree in computing should take courses that count towards that degree rather than just general electives.

Delete:
• COMS Elective (9 hours)

Total Hours: 12</td></tr>
</table>

Appendix A

AAS Information Technology Assessment Plan

ABET Student Outcomes:

1. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
2. Communicate effectively in a variety of professional contexts.

	Outcome	
Course	1	2
COMS 1013 Programming I	I	
COMS 1333 Web and Mobile Technologies		I
COMS 2203 Programming II	I	
COMS 2703 Computer Hardware and Architecture		I

Storage of Materials:

All collected materials will reside on the department's shared drive, OneDrive, so that faculty/staff will have access to it while ensuring its security and stability.

Frequency of Measurement:

We will re-evaluate our assessment strategy by focusing on 1 objective every year to ensure continuous improvement.

How Data will be collected:

In the table below, we outline the courses and assignments where we will collect data for each outcome.

Level	Outcome	Course	Performance Indicator/Course Objective	Student Work Example
I	1	COMS 1103	Given an algorithm and/or problem statement, write a well-structured, well-documented program or program segment using standard control structures	Assignment
I	1	COMS 2203	Develop large scale programs	Assignment
I	2	COMS 1333	Design and publish a web page with text, images, and hyperlinks using standards-based coding	Assignment
I	2	COMS 2703	Demonstrate the ability to communicate correct terminology of various personal computer hardware components	Assignment