Summary November 23, 2021 Curriculum Committee, December, 2021 Faculty Senate December

1. College of Business – Department of Management & Marketing

    a. Modify the Curriculum in Business Data Analytics, as follows: (1) delete COMM 2173: Business & Professional Speaking; (2) add COMM 2173: Business & Professional Speaking; or COMM 2003: Public Speaking; (3) change ACCT 2003: Accounting Principles I to ACCT 2004: Accounting Principles I; (6) delete: ACCT 2000: Accounting Principles I Lab; (4) reduce 3 hour Elective to 2 hour Elective; (5) change BUAD 2053: Business Statistics to STAT 2163: Introduction to Statistical Methods or PSY /SOC 2053: Statistics for the Behavioral Sciences; (5) change BUAD 3023: Business Communications to ENGL 2053: Technical Writing; (6) delete "Specified Elective3" 6 hours; (7) delete "BOA Elective2" 9 hours; (8) add "Approved Elective2" 15 hours; (9) delete footnote 2: BDA Electives: MGMT 3113: Business Process Improvement, BDA 4031-3: Internship, BDA 4073: Special Topics; (10) delete footnote 3: Three hours of Advanced Electives from the following: MKT 4013: Digital Metrics, FIN 4033: Financial Modeling, COMS 1333: Web Publishing, COMS 2104: Foundations of Computer Programming I {Prerequisite COMS 1403: Orientation to Computing, Information, and Technology/COMS 1411: Computer and Information Science Lab) AND three hours of Support Elective from the following: MKT 3063: Social Media Marketing, PHIL 3103: Logic, HIM 4063: Organization and Administration (Prerequisite HIM 3023: Introduction to Health Information Management) MGMT 4103: Supply Chain Management; and (11) add footnote 2: Approved Electives: MGMT 3113: Business Process Improvement, BDA 4031-3: Internship, BDA 4073: Special Topics, MKT 4013: Digital Metrics, FIN 4033: Financial Modeling, COMS 1333: Web Publishing, COMS 1013: Programming I, COMS 1011: Programming I Lab, MKT 3063: Social Media Marketing, PHIL 3103: Logic, HIM 4063: Organization and Administration, MGMT 4103: Supply Chain Management, STAT 2303: Statistical Methods or higher-level STAT course;
    b. Add the Accelerated Bachelor of Science in Business Administration in Business Data Analytics to Master of Business Administration;
    c. Modify the Curriculum in Management Business Management Track, as follows: : (1) delete COMM 2173: Business & Professional Speaking; (2) add COMM 2173: Business & Professional Speaking; or COMM 2003: Public Speaking; (3) change ACCT 2003: Accounting Principles I to ACCT 2004: Accounting Principles I; (6) delete: ACCT 2000: Accounting Principles I Lab; (4) change BUAD 2053: Business Statistics to STAT 2163: Introduction to Statistical Methods or PSY /SOC 2053: Statistics for the Behavioral Sciences; (5) change BUAD 3023: Business Communications to ENGL 2053: Technical Writing; (6) Delete MGMT 3023 Principles of Human Resource Management; (7) delete MGMT 4053: Small Business Management; (8) delete MGMT 4213: Strategy and Leadership; (9) add 5 hours of Electives; (10) delete MGTM 4103: Supply Chain Management; and (11) change 3 hours Management or College of Business Elective to 9 hours College of Business Elective 3000-4000;

d. Add the Accelerated Bachelor of Science in Business Administration in Management to Master of Business Administration;

e. Modify the Curriculum in Marketing Digital Marketing, as follows: (1) delete COMM 2173: Business & Professional Speaking; (2) add COMM 2173: Business & Professional Speaking; or COMM 2003: Public Speaking; (3) change ACCT 2003: Accounting Principles I to ACCT 2004: Accounting Principles I; (6) delete: ACCT 2000: Accounting Principles I Lab; (4) change BUAD 2053: Business Statistics to STAT 2163: Introduction to Statistical Methods or PSY /SOC 2053: Statistics for the Behavioral Sciences; (5) change BUAD 3023: Business Communications to ENGL 2053: Technical Writing; (6) reduce Electives from 9 hours to 8 hours; (7) delete 6 hours of College of Business Elective 3000-4000; (8) add BDA 3013: Business Spreadsheet Modeling; and (9) add 3 hours of MKT Elective (3000-4000);

f. Add the Accelerated Bachelor of Science in Business Administration in Marketing to Master of Business Administration;

g. Modify the Curriculum for the Associate of Business Administration, as follows: as follows: (1) delete ACCT 2003: Accounting Principles I, and add ACCT 2004: Accounting Principles I; (2) change BUAD 2053: Business Statistics, TO: BUAD 2053: Business Statistics, STAT 2163: Introduction to Statistical Methods, or PSY/SOC 2053: Statistics for the Behavioral Sciences; and (3) change the electives from 3 hours to 2 hours;

h. Modify the Minor in Business and Entrepreneurship, as follows: (1) delete ACCT 2003: Accounting Principles I, and (2) add ACCT 2004: Accounting Principles I, or ACCT 2033: Accounting for Non-Business Majors;

i. Change the title of the Minor in General Business, TO: Business Administration; and modify the Curriculum, as follows: (1) delete ACCT 2003: Accounting Principles I, and (2) add ACCT 2004: Accounting Principles I, or ACCT 2033: Accounting for Non-Business Majors.

2. College of Arts & Humanities – Department of History & Political Science

a. Delete HIST 3291: Practicum in Public History, from the course descriptions;

b. Modify the course description for HIST 3273: Digital History, FROM: This is an experimental class, and has no official description other than it is a directed seminar in an area of social science. This class has been structured to focus on unique educational opportunities; TO: Course discusses the theoretical and practical impact of new media and technology on the study of history, especially in the field of Public History. It examines how digital media has influenced and is still influencing how we research, write, present, and teach history to a diverse audience;

c. Modify the Curriculum in Public History, as follows: (1) delete the following courses:

HIST 3223: Local and Oral History;

HIST 3243: Archive and Manuscript Management;

HIST 3281: Grant Writing for Historians;
HIST 3283: Historical Editing;
HIST 3291: Practicum in Public History;
HIST 4293: Historic Preservation;
HIST 4143: Native American History; and
HIST/ANTH/MUSM 4403: Interpretation/Education through Museum Methods;

(2) select 9 hours of Public History Core from the following list:

HIST 3223: Local and Oral History;
HIST 3243: Archive and Manuscript Management;
HIST 3273: Digital History;
HIST 4293: Historic Preservation; and
HIST/ANTH/MUSM 4403: Interpretation/Education through Museum;

(3) add 3 hours to the European/World History requirements (6 hours to 9 hours); (4) add 3 hours to the U.S. History requirements (6 hours to 9 hours); (5) change GEOG 3803: Historical Geography, or GEOG 4203: Place and Collective Memory, to 3 hours of 3000-4000 level GEOG Elective; (6) add 6 hours of 3000-4000 level HIST Electives; (7) delete one hours of Elective; and (8) update the introductory section of the catalog; and

d. Modify the Accelerated Bachelor of Arts in History to Master of Art in History, as follows: modify Footnote 7, FROM: Students can take up to 6 credit hours at the 5000-level and 6000-level that can count as 4000-level courses. Two graduate-level courses, HIST 6033 Readings in US History and HIST 6543 Readings in World History, can be used to replace two upper-division undergraduate electives, either US history, or world history, to fulfill the requirements for a BA degree in history, TO: Students admitted to the Accelerated Bachelor of Arts in History to the Master of Art in History may take any graduate HIST course at the 5000 and 6000 level to be used to substitute for any 4000-level HIST undergraduate course.

3. College of Engineering & Applied Sciences – Department of Electrical Engineering

a. Modify the Curriculum in Computer Engineering, as follows: (1) delete COMS 2903: Discrete Structure for Technical Majors; (2) add MATH 2703: Discrete Mathematics; and (3) change COMS 2104: Foundations of Computer Programming I, TO: COMS 1013: Programming I, and COMS 1011: Programming I Lab;
b. Modify the Curriculum in Electrical Engineering, as follows: (1) change COMS 2903: Discrete Structure for Technical Majors, OR MATH 2703: Discrete Mathematics, TO: MATH 2703: Discrete Mathematics; and (2) change COMS 2104: Foundations of Computer Programming I, TO: COMS 1013: Programming I, and COMS 1011: Programming I Lab;
c. Modify the Curriculum in Electrical Engineering Biomedical Option, as follows: Modify the Curriculum in Electrical Engineering, as follows: (1) change COMS 2903: Discrete Structure for Technical Majors, OR MATH 2703: Discrete Mathematics, TO: MATH 2703: Discrete Mathematics; and (2) change COMS 2104: Foundations of Computer Programming I, TO: COMS 1013: Programming I, and COMS 1011: Programming I Lab; and
d. Add the Accelerated Bachelor of Science in Electrical Engineering -Electrical Engineering and Electrical Engineering Biomedical Option, and Computer Engineering to Master of Engineering in Electrical Engineering.

4. College of Engineering & Applied Sciences – Department of Emergency Management

    a. Modify the course description for EAM 1013: Aim and Scope of Emergency Management, FROM: Provides a broad overview of Emergency Management in the context of Mitigation, Preparedness, Response, and Recovery. Required for major, TO: Provides a broad overview of the Emergency Management in the context of Mitigation, Preparedness, Response, and Recovery, with exploration of the causes, characteristics, nature and effects of natural and technological hazards. Require for major;
    b. Modify the Curriculum in Emergency Administration and Management, as follows: (1) delete EAM 1003: Living in the Hazardous Environment; and (2) add 3 hours of Electives; and
    c. Add the Accelerated Bachelor of Science in Emergency Administration and Management to Master of Science in Emergency Management and Homeland Security.

5. College of Engineering & Applied Sciences – Department of Mechanical Engineering

    a. Add the Accelerated Bachelor of Science in Mechanical Engineering -Mechanical Engineering to Master of Engineering in Mechanical Engineering.

6. College of Natural & Health Sciences – Department of Physical Sciences

    a. Add PHYS 4023: Computational Physics, to the course descriptions;
    b. Modify the Curriculum in Engineering Physics, as follows: (1) add the following courses:
        PHYS 2000: Physics Laboratory I
        PHYS 2010: Physics Laboratory II
        PHYS 3003: Optics
        PHYS 4023: Computational Physics
        PHYS 4213: Advanced Topics in Physics and Astronomy
        MATH 4003: Linear Algebra I
        STAT 2303: Statistical Methods;

        (2) delete the following courses:
        6 hours of 3000-4000 level Physics Elective
        3 hours of 3000-4000 level Mathematics Elective
        MATH 1914: Precalculus;

        (3) change PHYS 4951-4: Undergraduate Research in Physics or PHYS 4991-4: Special Problems in Physics and Astronomy, TO: PHYS 4951: Undergraduate Research in Physics; (4) require PHYS 4003: Thermodynamics and Statistical Mechanics, or 3 hours of 3000-4000 level Mathematics Elective excluding MATH 3003: Foundations of Number Systems, MATH 3033: Methods of Teaching Elementary Mathematics, and MATH 4113: History of Mathematics; (5) change COMS 2803 TO: COMS 1013: Programming I, and COMS 1011: Programming I Lab; (6) change Physical Science, Biology, Engineering, or Computer Science Electives from 7 hours to 9 hours requiring 3000-4000 level for 6 of the hours; and (7) change General Electives from 10 hours to 5 hours; and
    c. Modify the Curriculum in Physics, as follows: (1) add the following courses:

PHYS 2000: Physics Laboratory I
PHYS 2010: Physics Laboratory II
PHYS 3003: Optics
PHYS 4023: Computational Physics
PHYS 4213: Advanced Topics in Physics and Astronomy
MATH 4003: Linear Algebra I
STAT 2303: Statistical Methods

(2) delete the following courses:

6 hours of 3000-4000 level Physics Elective
3 hours of 3000-4000 level Mathematics Elective
MATH 1914: Precalculus

(3) change PHYS 4951-4: Undergraduate Research in Physics or PHYS 4991-4: Special Problems in Physics and Astronomy, TO: PHYS 4951: Undergraduate Research in Physics; (4) require PHYS 4003: Thermodynamics and Statistical Mechanics, or 3 hours of 3000-4000 level Mathematics Elective excluding MATH 3003: Foundations of Number Systems, MATH 3033: Methods of Teaching Elementary Mathematics, and MATH 4113: History of Mathematics; (5) change COMS 2803 TO: COMS 1013: Programming I, and COMS 1011: Programming I Lab; (6) change Physical Science, Biology, Engineering, or Computer Science Electives from 7 hours to 9 hours requiring 3000-4000 level for 6 of the hours; and (7) change General Electives from 10 hours to 5 hours

Summary November 23, 2021 Curriculum Committee, December, 2021 Faculty Senate December

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a. Delete HIST 3291: Practicum in Public History, from the course descriptions;

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HIST 3223: Local and Oral History;

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HIST 3281: Grant Writing for Historians;
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HIST 3291: Practicum in Public History;
HIST 4293: Historic Preservation;
HIST 4143: Native American History; and
HIST/ANTH/MUSM 4403: Interpretation/Education through Museum Methods;

(2) select 9 hours of Public History Core from the following list:

HIST 3223: Local and Oral History;
HIST 3243: Archive and Manuscript Management;
HIST 3273: Digital History;
HIST 4293: Historic Preservation; and
HIST/ANTH/MUSM 4403: Interpretation/Education through Museum;

(3) add 3 hours to the European/World History requirements (6 hours to 9 hours); (4) add 3 hours to the U.S. History requirements (6 hours to 9 hours); (5) change GEOG 3803: Historical Geography, or GEOG 4203: Place and Collective Memory, to 3 hours of 3000-4000 level GEOG Elective; (6) add 6 hours of 3000-4000 level HIST Electives; (7) delete one hours of Elective; and (8) update the introductory section of the catalog; and

d. Modify the Accelerated Bachelor of Arts in History to Master of Art in History, as follows: modify Footnote 7, FROM: Students can take up to 6 credit hours at the 5000-level and 6000-level that can count as 4000-level courses. Two graduate-level courses, HIST 6033 Readings in US History and HIST 6543 Readings in World History, can be used to replace two upper-division undergraduate electives, either US history, or world history, to fulfill the requirements for a BA degree in history, TO: Students admitted to the Accelerated Bachelor of Arts in History to the Master of Art in History may take any graduate HIST course at the 5000 and 6000 level to be used to substitute for any 4000-level HIST undergraduate course.

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d. Add the Accelerated Bachelor of Science in Electrical Engineering -Electrical Engineering and Electrical Engineering Biomedical Option, and Computer Engineering to Master of Engineering in Electrical Engineering.

College of Engineering & Applied Sciences – Department of Emergency Management

a. Modify the course description for EAM 1013: Aim and Scope of Emergency Management, FROM: Provides a broad overview of Emergency Management in the context of Mitigation, Preparedness, Response, and Recovery. Required for major, TO: Provides a broad overview of the Emergency Management in the context of Mitigation, Preparedness, Response, and Recovery, with exploration of the causes, characteristics, nature and effects of natural and technological hazards. Require for major;
b. Modify the Curriculum in Emergency Administration and Management, as follows: (1) delete EAM 1003: Living in the Hazardous Environment; and (2) add 3 hours of Electives; and
c. Add the Accelerated Bachelor of Science in Emergency Administration and Management to Master of Science in Emergency Management and Homeland Security.

4. College of Engineering & Applied Sciences – Department of Mechanical Engineering

a. Add the Accelerated Bachelor of Science in Mechanical Engineering -Mechanical Engineering to Master of Engineering in Mechanical Engineering.

5. College of Natural & Health Sciences – Department of Physical Sciences

a. Add PHYS 4023: Computational Physics, to the course descriptions;
b. Modify the Curriculum in Engineering Physics, as follows: (1) add the following courses:
    PHYS 2000: Physics Laboratory I
    PHYS 2010: Physics Laboratory II
    PHYS 3003: Optics
    PHYS 4023: Computational Physics
    PHYS 4213: Advanced Topics in Physics and Astronomy
    MATH 4003: Linear Algebra I
    STAT 2303: Statistical Methods;
    (2) delete the following courses:
    6 hours of 3000-4000 level Physics Elective
    3 hours of 3000-4000 level Mathematics Elective
    MATH 1914: Precalculus;
    (3) change PHYS 4951-4: Undergraduate Research in Physics or PHYS 4991-4: Special Problems in Physics and Astronomy, TO: PHYS 4951: Undergraduate Research in Physics; (4) require PHYS 4003: Thermodynamics and Statistical Mechanics, or 3 hours of 3000-4000 level Mathematics Elective excluding MATH 3003: Foundations of Number Systems, MATH 3033: Methods of Teaching Elementary Mathematics, and MATH 4113: History of Mathematics; (5) change COMS 2803 TO: COMS 1013: Programming I, and COMS 1011: Programming I Lab; (6) change Physical Science, Biology, Engineering, or Computer Science Electives from 7 hours to 9 hours requiring 3000-4000 level for 6 of the hours; and (7) change General Electives from 10 hours to 5 hours; and
c. Modify the Curriculum in Physics, as follows: (1) add the following courses:

PHYS 2000: Physics Laboratory I
PHYS 2010: Physics Laboratory II
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PHYS 4023: Computational Physics
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6 hours of 3000-4000 level Physics Elective
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(3) change PHYS 4951-4: Undergraduate Research in Physics or PHYS 4991-4: Special Problems in Physics and Astronomy, TO: PHYS 4951: Undergraduate Research in Physics; (4) require PHYS 4003: Thermodynamics and Statistical Mechanics, or 3 hours of 3000-4000 level Mathematics Elective excluding MATH 3003: Foundations of Number Systems, MATH 3033: Methods of Teaching Elementary Mathematics, and MATH 4113: History of Mathematics; (5) change COMS 2803 TO: COMS 1013: Programming I, and COMS 1011: Programming I Lab; (6) change Physical Science, Biology, Engineering, or Computer Science Electives from 7 hours to 9 hours requiring 3000-4000 level for 6 of the hours; and (7) change General Electives from 10 hours to 5 hours

Tammy Weaver

From: Tammy Weaver
Sent: Monday, November 1, 2021 1:36 PM
To: David Ward; Tracy Cole; Herbert E. Brown; Russell Jones
Cc: Nina Goza
Subject: RE: Tabled Curriculum Changes Due to Statistics

Dr. Ward

Thanks for your response. I feel the advisors will advise students to take MATH 2163. I can list PSY/SOC 2053 as an option in the footnote.

Thanks.

Tammy

Tammy Weaver, Registrar
Arkansas Tech University
Office of the Registrar
Brown Building, Suite 307
105 West O Street
Russellville, AR 72801-2222

Telephone: 479.968.0643
Fax: 479.968.0683
Email: tweaver@atu.edu

Please take a minute to complete this survey on the service you received.
http://www.atu.edu/registrar/survey.php

From: David Ward
Sent: Monday, November 1, 2021 1:34 PM
To: Tracy Cole <tcole7@atu.edu>; Herbert E. Brown <hbrown11@atu.edu>; Russell Jones <rjones@atu.edu>
Cc: Tammy Weaver <tweaver@atu.edu>; Nina Goza <ngoza@atu.edu>
Subject: Re: Tabled Curriculum Changes Due to Statistics

OK, I see that is will mess with your prereqs if it is not like that....just please encourage student to take the STATS. We cannot handle more than a few more students every semester.

d

David Ward, Ph.D.
Department Head and Professor of Psychology
Department of Behavioral Sciences

Arkansas Tech University
Russellville, AR 72801
(479) 968-0305

From: Tracy Cole <tcole7@atu.edu>
Sent: Friday, October 29, 2021 5:25 PM
To: Herbert E. Brown <hbrown11@atu.edu>; Russell Jones <rjones@atu.edu>
Cc: Tammy Weaver <tweaver@atu.edu>; David Ward <dwward@atu.edu>; Nina Goza <ngoza@atu.edu>
Subject: Re: Tabled Curriculum Changes Due to Statistics

Yes, this sounds good. I spoke with Tammy today. She recommends that we put STAT 2163 as the required course in the matrix with PSY 2053 in a footnote as an allowable substitution. In the course COB course descriptions, however, any course that has statistics as a prereq or coreq would list both STAT 2163 and PSY 2053. This way we can avoid doing course substitutions if a student has already taken PSY 2053, and we can also avoid having to do registration overrides for all of the COB courses that have statistics as a prereq or coreq.

Thanks,
Tracy

Tracy Cole, J.D.

Associate Dean

Professor of Legal Studies

Arkansas Tech University

College of Business

Rothwell Hall 430

Russellville, AR 72801

479-968-0491

From: Herbert E. Brown <hbrown11@atu.edu>
Sent: Friday, October 29, 2021 11:00 AM
To: Tracy Cole <tcole7@atu.edu>; Russell Jones <rjones@atu.edu>
Subject: Fw: Tabled Curriculum Changes Due to Statistics

FYI, sounds like this is worked out and will not be an issue at the next meeting.

Thanks,

Matt

From: David Ward <dwward@atu.edu>
Sent: Friday, October 29, 2021 10:56 AM
To: Herbert E. Brown <hbrown11@atu.edu>
Subject: Re: Tabled Curriculum Changes Due to Statitics

Matt,

Yes, we can handle those types of numbers. I talked to Tammy and we had come up with a solution that went something like this.....PSY/SOC 2053 won't be "pushed" in the catalog as what you should take. In the matrix and other spots it would show STATS 2153 as the required class, but there would be an asterisk that states PSY 2053 *could* be substituted but it would not be the expected class to take. Or, just don't mention PSY 2053 in the catalog and sub it when necessary. Those types of solution are fine with me....what we couldn't handle is that most of the 55 (fall) or 22 (spring) end up in my classes. That will be a real problem because we are running things on a razors edge over here and those type of numbers would block out BEHV students....and we can't offer any more sections....my faculty is packed, number of classes-wise.

Hope that solution helps,

dw

David Ward, Ph.D.
Department Head and Professor of Psychology
Department of Behavioral Sciences
Arkansas Tech University
Russellville, AR 72801
(479) 968-0305

From: Herbert E. Brown <hbrown11@atu.edu>
Sent: Friday, October 29, 2021 10:26 AM
To: David Ward <dwward@atu.edu>
Cc: Tracy Cole <tcole7@atu.edu>; Russell Jones <rjones@atu.edu>; Tammy Weaver <tweaver@atu.edu>
Subject: Tabled Curriculum Changes Due to Statitics

Good morning Dr. Ward,

I don't know if you have been contacted about this already, but the College of Business had several curriculum changes tabled at the curriculum committee meeting on Tuesday due to lack of resolution over the department support form that did not support the PSY/SOC 2053 as an optional replacement course for BUAD 2053 (Business Statistics).

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected:	This department does **NOT** support the change.
Behavioral Sciences	

Comments:

There are NO spaces available in our BEHV statistics classes. If BUSN students load into Behavioral Science stats classes and fill them up, it will delay the progress, and likely the graduation, of Behavioral Sciences students. If we had extra capacity in those classes, we would have already cut them and used the faculty in other content classes, where they are very much needed.

Department Head Signature: David Ward

Date: 2/25/2021

Please note that, due to budget constraints, the College of Business has not offered BUAD 2053 in 2021. As a result, we can already see the impact this change has made on student enrollment in Behavioral Science (and Math) statistics sections. If it helps in the discussion, I asked Institutional Research to pull the numbers on where the College of Business students went for statistics. As you can see below, the impact to PSY/SOC 2053 was 3 students in the spring semester and 6 students in the fall semester.

year	term	course	# COB Students
2021	spring	PSY 2053	3
2021	spring	STAT2163	22
2021	summer	STAT2163	3
2021	fall	PSY 2053	5
2021	fall	SOC 2053	1
2021	fall	STAT2163	55

Thanks,

Matt Brown, PhD
Professor of Business Data Analytics
Director of Curriculum and Assurance of Learning for the College of Business
479-968-0630

ARKANSAS TECH UNIVERSITY

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SEP 16 2021
Registrar's Office

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Management and Marketing	2-20-21

Title	Signature	Date
Department Head **Kevin Mason**		
Dean **Russ Jones**	Kirk Russell Jones	7/19/2021
Assessment Christine Austin	Christi Austin	7.19.2021
Registrar	Tammy Lee Allen	9/23/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Business Data Analytics (BDA)

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 COMM 2173 Business & Professional Speaking**
   and Add COMM 2173 or COMM 2003
2. **Change: ACCT 2003/2000 to ACCT 2004**
   and Reduce 3 hour Elective to 2 hour Elective
3. **Delete: BUAD 2053 Business Statistics**
   and Add STAT 2163 or PSY/SOC 2053
4. **Delete: BUAD 3023 Business Communications**
   and Add ENGL 2053 Technical Writing
5. **Delete "Specified Elective3" (6 hours)** Advanced Electives and Support Electives
   and Delete "BDA Elective2" (9 hours)
   and Add "Approved Elective2" (15 hours)
6. **Add footnote: [2]Approved Electives: MGMT 3113 Business Process Improvement, BDA 4031-3 Internship, BDA 4073 Special Topics, MKT 4013 Digital Metrics, FIN 4033 Financial Modeling, COMS 1333 Web Publishing, ~~COMS 2104 Foundations of Computer Programming I (Prerequisite COMS 1403 Orientation to Computing, Information, and Technology/COMS 1411 Computer and Information Science Lab)~~, MKT 3063 Social Media Marketing, PHIL 3103 Logic, HIM 4063 Organization and Administration, MGMT 4103 Supply Chain Management, STAT 2303 Statistical Methods or higher STAT course**

and Delete footnotes: [2]BDA Electives: MGMT 3113 Business Process Improvement, BDA 4031-3 Internship, BDA 4073 Special Topics; [3]Three hours of Advanced Electives from the following: MKT 4013 Digital Metrics FIN 4033 Financial Modeling COMS 1333 Web Publishing; COMS 2104 Foundations of Computer Programming I (Prerequisite COMS 1403 Orientation to Computing, Information, and Technology/COMS 1411 Computer and Information Science Lab) AND three hours of Support Elective from the following: MKT 3063 Social Media Marketing PHIL 3103 Logic, HIM 4063 Organization and Administration (Prerequisite HIM 3023 Introduction to Health Information Management) MGMT 4103 Supply Chain Management.

COMS 1013 Programming I
COMS 1011 Programming I Lab

What impact will the change have on staffing, on other programs and space allocation?
This proposal will reduce the existing demand on BDA faculty resources.

Answer the following Assessment questions:

a. How does the program change align with the university mission?
This proposal fits with the mission in that the new major prepares students for success in the 21st century.

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

c. What is the rationale for this program change?
   1. How will the program change impact learning for students enrolled in this program?
Due to financial resource restrictions, the MGMK department needs to streamline course offerings to be more efficient in course offerings.
   2. Provide an example or examples of student learning assessment evidence which supports the changes in the program.

Not applicable.

b. 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.
This proposal improves efficiency without otherwise impacting our BDA major.

c. 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.)
Attached

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.
Attached

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

Curriculum Matrix for Catalog Curriculum in*_____ (enter title for program changing)	
Freshman Fall Semester Add/Change: **COMM 2173 (Business & Professional Speaking) or COMM 2003 (Public Speaking)** Add/Change: **Fine Arts & Humanities[1] (3 hours)** Delete: **3 hour Elective** Total Hours: **Increase total hours from 13 to 16**	Freshman Spring Semester Add/Change: **Science with Lab[1] (4 hours)** Delete: **COMM 2173 (Business & Professional Speaking)** Total Hours: **Increase total hours from 15 to 16**
Sophomore Fall Semester Add: **STAT 2163 (Introduction to Statistical Methods) or PSY/SOC 2053** Add/Change: **Fine Arts & Humanities[1] (3 hours)** Change: **ACCT 2003/2000 to ACCT 2004** Delete: **BUAD 3023 (Business Communications)** Delete: **BUAD 2053 (Business Statistics)** Total Hours: **Increase total hours from 15 to 16.**	Sophomore Spring Semester Add/Change: **ENGL 2053 (Technical Writing)** Delete: **BDA 3053 (Business Data Analysis)**
Junior Fall Semester Add: **3 hr. Approved Elective[2]** Delete: **ECON 3093 (Econometrics)**	Junior Spring Semester Add: **ECON 3093 (Econometrics)** Add: **6 hr. Approved Elective[2]** Add: **BDA 3053 (Business Data Analysis)** Delete: **6 hr. BDA Elective[2]** Delete: **3 hr. Specified Elective[3]** Delete:**Science with Lab (4 hours)** Total Hours: **Decrease total hours from 16 to 15.**
Senior Fall Semester Add/Change: **6 hr. Approved Elective[2]** Add/Change: **2 hr. Elective** Delete: **3 hr. Specified Elective[3]** Delete: **Fine Arts & Humanities (6 hours)** Total Hours: **Decrease total hours from 15 to 14.**	Senior Spring Semester Add/Change: Delete: **3 hr. BDA Elective[2]** Total Hours: **Decrease total hours from 15 to 12.**

Add footnote:

[2]Approved Electives: MGMT 3113 Business Process Improvement, BDA 4031-3 Internship, BDA 4073 Special Topics, MKT 4013 Digital Metrics, FIN 4033 Financial Modeling, COMS 1333 Web Publishing, COMS 2104 Foundations of Computer Programming I (Prerequisite COMS 1403 Orientation to Computing, Information, and Technology/COMS 1411 Computer and Information Science Lab), MKT

3063 Social Media Marketing, PHIL 3103 Logic, HIM 4063 Organization and Administration, MGMT 4103 Supply Chain Management, STAT 2303 Statistical Methods or higher STAT course

Delete footnotes:

[2]**BDA Electives:** MGMT 3113 Business Process Improvement, BDA 4031-3 Internship, BDA 4073 Special Topics.

[3]**Three hours of Advanced Electives from the following:**
MKT 4013 Digital Metrics
FIN 4033 Financial Modeling
COMS 1333 Web Publishing
COMS 2104 Foundations of Computer Programming I **(Prerequisite** COMS 1403 Orientation to Computing, Information, and Technology/COMS 1411 Computer and Information Science Lab**)**
AND **three hours of Support Elective from the following:**
MKT 3063 Social Media Marketing
PHIL 3103 Logic
HIM 4063 Organization and Administration **(Prerequisite** HIM 3023 Introduction to Health Information Management**)**
MGMT 4103 Supply Chain Management.

College of Business AOL Process

Overview of the College of Business Assessment Process

1. During the Fall 2018 semester the faculty helped create the following five rubrics for the first four COB learning objectives:

a. Oral Communication – summary data to be collected in MGMT 4083

b. Written Communication – summary data to be collected in MGMT 4083; formative data in BLAW 2033

c. Technology – summary data to be collected in MGMT 4013 & ACCT 3023

d. Professionalism – summary data to be collected in BUAD 3023 (using multiple volunteers)

e. Ethics – summary data to be collected in MGMT 3123.

2. Foundational business knowledge has been assessed using the ETS Major Field Test. During the Spring 2019 semester, the faculty developed an in-house Senior Business Exam. This exam will be administered along with the ETS test for the Spring 2019 and Fall 2019 semesters to ensure the reliability of the exam. After that, only the Senior Business Exam will be administered. Formative data will also be collected in the individual business core classes.

3. The Director of Assessment's office will compile all data collected from the rubrics and the Senior Business Exam and will produce reports/charts showing the results. These will be shared with all members of the AOL/Curriculum Committee. The designated department representative on the committee will then discuss the results with his/her department to determine any corrective actions that are determined to be needed. Any curriculum proposals will be submitted to the committee; teaching techniques, change in textbooks, etc., will be implemented by the appropriate faculty.

Master Schedule of Activities to meet the Mission of the ATU College of Business

College of Business

	F2019	SP2020	F2020	SP2021	F2021	SP2022	F2022	SP2023	F2023	SP2024	F2024	SP2025	F2025	SP2026
AACSB	Visit	Update[1]									Visit			
Mission Statement			Revise[2]										Revise	
Strategic Plan	Update		Assess/Revise[2]		Implement		Update		Update		Update		Assess/Revise	
Internal Program Review	BDA		ACCT		MKT		MGMT		FIN, ECON, MBA		BDA		ACCT	

[1] - AACSB will be implementing new standards for accreditation

[2] - ATU will begin university strategic plan, mission, and vision update; COB will do the same to ensure congruence

Undergraduate

	F2019	SP2020	F2020	SP2021	F2021	SP2022	F2022	SP2023	F2023	SP2024	F2024	SP2025	F2025	SP2026
Written Comm	MGMT 4083/ BLAW 2033		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083	
Oral Comm	BLAW 2033	MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083
Ethics			MGMT 3123				MGMT 3123				MGMT 3123			
Professionalism	BUAD 3023				BUAD 3023				BUAD 3023				BUAD 3023	
Technology		MGMT 4013/ AIS 3023				MGMT 4013/ AIS 3023				MGMT 4013/ AIS 3023				MGMT 4013/ AIS 3023
ETS*	X													
Senior Business Exam	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* - The ETS will be replaced with the college's own Senior Business Exam

Graduate

	F2019	SP2020	F2020	SP2021	F2021	SP2022	F2022	SP2023	F2023	SP2024	F2024	SP2025	F2025	SP2026
Ethics			FIN 6103				FIN 6103				FIN 6103			
Oral Comm				MGMT 6903				MGMT 6903				MGMT 6903		
Technology			BDA 6203				BDA 6203				BDA 6203			
Written Comm	MGMT 6103				MGMT 6103				MGMT 6103				MGMT 6103	
ETS*	X	X	X											
Graduate Business Exam	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* - The ETS will be replaced with the college's own Graduate Business Exam

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: Behavioral Sciences	This department does **NOT** support the change.
Comments: There are NO spaces available in our BEHV statistics classes. If BUSN students load into Behavioral Science stats classes and fill them up, it will delay the progress, and likely the graduation, of Behavioral Sciences students. If we had extra capacity in those classes, we would have already cut them and used the faculty in other content classes, where they are very much needed.	

Department Head Signature: _ 

Date: 2/25/2021

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: English and World Languages	This department √ supports ☐ does not support the change.
Comments: The Department of English and World Languages will provide seats for MGMK students who need ENGL 2053.	

Department Head Signature: _____

Date: February 25, 2021

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: MATH	This department ☒ supports ☐ does not support the change.
Comments:	

Department Head Signature: Jessica L. Myers

Date: 2-25-21

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
BSBA – Business Data Analytics Accelerated Bachelor's Plus MBA Degree	7/15/2021

Title	Signature	Date
Department Head		
Dean	Kirk Russell Jones	7/14/2021
Assessment	Christi Austin	7.19.21
Registrar	Tammy Weaver	9/23/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
BSBA – Business Data Analytics Accelerated Bachelor's Plus MBA Degree

Outline change in program:

1. This program partners the BSBA undergraduate degree with the MBA degree.
2. A maximum of 12 graduate level credit hours can be counted towards both the BSBA degree in Business Data Analytics and the MBA degree.
3. Four graduate level courses can be used to replace four upper-division undergraduate courses as follows:
    - BDA 6203 can replace MKT 3153
    - MGMT 6203 can replace MGMT 4103
    - MKT 6103 can replace MKT 4013
    - BDA 6323 can replace BDA 4003
4. Students may apply in their junior year for admission into the Business Data Analytics Accelerated Bachelor's Plus MBA Degree; however, they must have completed a minimum of 90 credit hours towards the Bachelor degree and have earned a minimum GPA of 3.0 or higher in those undergraduate courses to be eligible. Once approved, the student will be conditionally admitted into the MBA program.
5. Only courses with the grade of B or better will be eligible for graduate credit
6. All other general requirements for both the BSBA-Business Data Analytics and the MBA must be satisfied
7. Upon completion of the BSBA-Business Data Analytics degree requirements, students will be accepted into the Graduate College at a status consistent with the Graduate College and individual program guidelines.
8. Students must meet all of the graduate requirements for dual credit courses to receive graduate credit for these courses to contribute toward their MBA degree.
9. Students in this program will apply for graduation with the BSBA-Business Data Analytics degree on the schedule delineated in the Undergraduate Catalog and will receive their bachelor's degree upon completion of all of the requirements for the undergraduate degree. The MBA degree will be awarded when the student has completed the remaining requirements for the graduate degree.

What impact will the change have on staffing, on other programs and space allocation?

No additional staffing will be required and there will be no impact on other programs or space allocation.

Answer the following Assessment questions:

a. How does the program change align with the university mission?

This program contributes to student success by offering more opportunities for students to access an MBA degree. By providing students the opportunity to have completed 40% of the MBA requirements upon graduation with their undergraduate degree, this increases the "stackability" of degrees in the College of Business and strongly encourages students to complete the remainder of their MBA.

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

Not applicable

c. What is the rationale for this program change?

1. How will the program change impact learning for students enrolled in this program?

For students who are contemplating graduate studies, this program provides them the opportunity to receive 12 hours of graduate credit without delaying their undergraduate studies. This program also provides the student the opportunity to receive graduate credit while utilizing their current undergraduate financial aid.

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

As this is a new type of program at ATU, no assessment evidence currently exists.

b. 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.

Arkansas State University-Jonesboro (ASUJ) currently offers a similar program within the Neil Griffin College of Business. ASUJ allows students to receive up to 12 hours of graduate credit toward the Master of Accountancy degree while completing their BS – Accounting. In addition, AACSB has seen a tremendous growth in accelerated programs across colleges of business in the United States. It has proven to be successful in recruiting students into their respective graduate programs.

c. 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.)

The program goals for the BSBA degree and the MBA degree have tremendous overlap. Both programs have the following goals: Oral Communication, Written Communication, Problem Solving, Ethics, and Business Acumen. The difference between the undergraduate and graduate programs is the level of Bloom's Taxonomy which is expected. Since the MBA program expects a 'higher' level and the artifacts in this program will be assessed at the graduate level, students in this program will be expected to meet the higher performance standard.

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.

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

Curriculum Matrix for Catalog Curriculum in_____ (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: Delete: Total Hours:
Sophomore Fall Semester Add/Change: Delete: Total Hours:	Sophomore Spring Semester Add/Change: Delete: Total Hours:
Junior Fall Semester Add/Change: Delete: Total Hours:	Junior Spring Semester Add/Change: Delete: Total Hours:
Senior Fall Semester Add/Change: Delete: Total Hours:	Senior Spring Semester Add/Change: Delete: Total Hours:

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Management and Marketing	2/20/2021

Title	Signature	Date
Department Head Kevin Mason (Interim)	Kevin Mason	03/15/2021
Dean Russ Jones	Kirk Russell Jones	7/19/2021
Assessment Christine Austin		9.27.21
Registrar		9/27/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
The current Program is Management Major- Business Management Track. This proposal is to replace the track with a **Management** major.

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. **The Management and Marketing Department propose to delete three Management major tracks (concentrations) of Entrepreneurship, Human Resource Management, and Business Management and replace them with the proposed Management major.**
2. **Delete COMM 2173 Business & Professional Speaking**
   and Add COMM 2173 or COMM 2003
3. **Change: ACCT 2003/2000 to ACCT 2004**
   ~~and Reduce 3 hour elective to 2 hour Elective~~
4. **Delete: BUAD 2053 Business Statistics**
   and Add STAT 2163 or PSY/SOC 2053
5. **Delete: BUAD 3023 Business Communications**
   and Add ENGL 2053 Technical Writing
6. **Delete MGMT 3023 Principles of Human Resource Management**
   ~~and increase Management Elective 3000-4000 from 3 to 6 hours~~
7. **~~Change 3 hour Management Elective to 3 hour College of Business Elective 3000-4000~~**
8. **Delete MGMT 4053 Small Business Management**
   and Delete MGMT 4213 Strategy and Leadership
   and Add ~~6~~ 5 hours of Electives
9. **Delete MGMT ~~4203~~ Supply Chain Management** 4103
   and Change (3 hour Management or College of Business Elective) to ~~6~~ 9 hour College of Business Elective 3000-4000

What impact will the change have on staffing, on other programs and space allocation?

This proposal will reduce the existing demand on Marketing faculty resources.

Answer the following Assessment questions:

a. How does the program change align with the university mission?

   This proposal fits with the mission in that the new major prepares students for success in the 21st century.

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

   Not applicable.

c. What is the rationale for this program change?
   1. How will the program change impact learning for students enrolled in this program?

      Due to financial resource restrictions, the MGMK department needs to streamline course offerings to be more efficient in course offerings.

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

      N/A

b. 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.

   This proposal aligns our marketing major with changes in the marketing discipline that have occurred with advances in technology and information analytics.

c. 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.)

   Attached

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.

Attached are approvals from the ACCT/FIN, ENGL, MATH, Behavioral Sciences, HA and COMS departments.

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

Curriculum Matrix for Catalog Curriculum in _Business Management Track_ (New Major: Management)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: Change COMM 2173 (Business & Professional Speaking) to COMM2173 (Business & Professional Speaking) or COMM 2003 (Public Speaking) Add: Science with Lab[1] Delete: Fine Arts & Humanities[1] Total Hours: Increase from 15 to 16
Sophomore Fall Semester Change ACCT 2003/2000 to ACCT 2004 Add: Fine Arts & Humanities[1] Delete: Science with Lab[1] Total Hours:	Sophomore Spring Semester Add: STAT 2163 or PSY/SOC 2053 Delete BUAD 2053 (Business Statistics) Total Hours:
Junior Fall Semester Add: ENGL 2053 (Technical Writing) Change: Increase Management Elective (3000-4000) hours from 3 to 6 hours. Delete: MGMT 3023 (Principles of Human Resource Management) Delete: BUAD 3023 (Business Communications). Total Hours:	Junior Spring Semester Add/Change: Delete: Total Hours:
Senior Fall Semester Add: Electives (6 Hours) Change: Management Elective (3000-4000) to College of Business Elective (3000-4000). Delete: MGMT 4053 (Small Business Management) Delete: MGMT 4213 (Strategy and Leadership). Total Hours:	Senior Spring Semester Add Change: Management or College of Business Elective (3000-4000) to College of Business Elective (3000-4000) and increased the number of hours required from 3 to 6 hours. Change: Lower the number of Electives from 3 to 2 hours. Delete: MGMT 4103 (Supply Chain Management) Total Hours: Reduce the total hours from 12 to 11 hours.

MEMO

From: Kevin Mason (Interim MGMK Department Head)

Re: Phase out existing Management Tracks and replace with a Management Major

The Management and Marketing Department will discontinue offering the Management major tracks (concentrations) of Entrepreneurship, Human Resource Management, and Business Management and replace them with the proposed Management major. Exiting management majors will be encouraged to change their major to the Management major as the current management tracks will be phased it out by the end of May 2025. The department asks that the existing Management major tracks be deleted from the 2022/23 catalog.

College of Business AOL Process

Overview of the College of Business Assessment Process

1. During the Fall 2018 semester the faculty helped create the following five rubrics for the first four COB learning objectives:

a. Oral Communication – summary data to be collected in MGMT 4083

b. Written Communication – summary data to be collected in MGMT 4083; formative data in BLAW 2033

c. Technology – summary data to be collected in MGMT 4013 & ACCT 3023

d. Professionalism – summary data to be collected in BUAD 3023 (using multiple volunteers)

e. Ethics – summary data to be collected in MGMT 3123.

2. Foundational business knowledge has been assessed using the ETS Major Field Test. During the Spring 2019 semester, the faculty developed an in-house Senior Business Exam. This exam will be administered along with the ETS test for the Spring 2019 and Fall 2019 semesters to ensure the reliability of the exam. After that, only the Senior Business Exam will be administered. Formative data will also be collected in the individual business core classes.

3. The Director of Assessment's office will compile all data collected from the rubrics and the Senior Business Exam and will produce reports/charts showing the results. These will be shared with all members of the AOL/Curriculum Committee. The designated department representative on the committee will then discuss the results with his/her department to determine any corrective actions that are determined to be needed. Any curriculum proposals will be submitted to the committee; teaching techniques, change in textbooks, etc., will be implemented by the appropriate faculty.

Master Schedule of Activities to meet the Mission of the ATU College of Business

College of Business

	F2019	SP2020	F2020	SP2021	F2021	SP2022	F2022	SP2023	F2023	SP2024	F2024	SP2025	F2025	SP2026
AACSB	Visit	Update[1]									Visit			
Mission Statement			Revise[2]										Revise	
Strategic Plan	Update		Assess/Revise[2]		Implement		Update		Update		Update		Assess/Revise	
Internal Program Review	BDA		ACCT		MKT		MGMT		FIN, ECON, MBA		BDA		ACCT	

[1] - AACSB will be implementing new standards for accreditation

[2] - ATU will begin university strategic plan, mission, and vision update; COB will do the same to ensure congruence

Undergraduate

	F2019	SP2020	F2020	SP2021	F2021	SP2022	F2022	SP2023	F2023	SP2024	F2024	SP2025	F2025	SP2026
Written Comm	MGMT 4083/ BLAW 2033		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083	
Oral Comm	BLAW 2033	MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083
Ethics			MGMT 3123				MGMT 3123				MGMT 3123			
Professionalism	BUAD 3023				BUAD 3023				BUAD 3023				BUAD 3023	
Technology		MGMT 4013/ AIS 3023				MGMT 4013/ AIS 3023				MGMT 4013/ AIS 3023				MGMT 4013/ AIS 3023
ETS*	X													
Senior Business Exam	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* - The ETS will be replaced with the college's own Senior Business Exam

Graduate

	F2019	SP2020	F2020	SP2021	F2021	SP2022	F2022	SP2023	F2023	SP2024	F2024	SP2025	F2025	SP2026
Ethics			FIN 6103				FIN 6103				FIN 6103			
Oral Comm				MGMT 6903				MGMT 6903				MGMT 6903		
Technology			BDA 6203				BDA 6203				BDA 6203			
Written Comm	MGMT 6103				MGMT 6103				MGMT 6103				MGMT 6103	
ETS*	X	X	X											
Graduate Business Exam	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* - The ETS will be replaced with the college's own Graduate Business Exam

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected:	This department ☑ supports ☐ does not support the change.
Accounting, Finance and Economics	
Comments:	

Department Head Signature: Tracy Cole

Date: 3-4-21

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: Behavioral Sciences	This department does **NOT** support the change.
Comments: There are NO spaces available in our BEHV statistics classes. If BUSN students load into Behavioral Science stats classes and fill them up, it will delay the progress, and likely the graduation, of Behavioral Sciences students. If we had extra capacity in those classes, we would have already cut them and used the faculty in other content classes, where they are very much needed.	

Department Head Signature: _ 

Date: 2/25/2021

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: Computer and Information Science	This department ☒ supports ☐ does not support the change.
Comments:	

Department Head Signature: Jerry Wood

Date: 2-24-2021

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected:	This department √ supports ☐ does not support the change.
English and World Languages	
Comments: The Department of English and World Languages will provide seats for MGMK students who need ENGL 2053.	

Department Head Signature: _____

Date: February 25, 2021

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: Hospitality Administration	This department ☒ supports ☐ does not support the change.
Comments: No comments at this time - we understand the need to discontinue offering these courses.	

Department Head Signature: Cathi McMahan

Date: 2/25/21

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected:	This department ☒ supports ☐ does not support the change.
MATH	
Comments:	

Department Head Signature: Jessica L. Myers

Date: 2-25-21

ARKANSAS TECH UNIVERSITY

RECEIVED

SEP 16 2021

Registrar's Office

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
BSBA – Management Accelerated Bachelor's Plus MBA Degree	7/15/2021

Title	Signature	Date
Department Head		
Dean	Kirk Russell Jones	7/14/2021
Assessment	Christi Austin	7.19.21
Registrar	Tammy Cleaver	9/16/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
BSBA – Management Accelerated Bachelor's Plus MBA Degree

Outline change in program:

1. This program partners the BSBA undergraduate degree with the MBA degree.
2. A maximum of 12 graduate level credit hours can be counted towards both the BSBA degree in Management and the MBA degree.
3. Four graduate level courses can be used to replace four upper-division undergraduate courses as follows:
    - BDA 6203 can replace MGMT 4073
    - MGMT 6203 can replace MGMT 4103
    - MGMT 6103 can replace MGMT 4213
    - MKT 6113 can replace MKT 4103
4. Students may apply in their junior year for admission into the Management Accelerated Bachelor's Plus MBA Degree; however, they must have completed a minimum of 90 credit hours towards the Bachelor degree and have earned a minimum GPA of 3.0 or higher in those undergraduate courses to be eligible. Once approved, the student will be conditionally admitted into the MBA program.
5. Only courses with the grade of B or better will be eligible for graduate credit
6. All other general requirements for both the BSBA-Management and the MBA must be satisfied
7. Upon completion of the BSBA-Management degree requirements, students will be accepted into the Graduate College at a status consistent with the Graduate College and individual program guidelines.
8. Students must meet all of the graduate requirements for dual credit courses to receive graduate credit for these courses to contribute toward their MBA degree.
9. Students in this program will apply for graduation with the BSBA-Management degree on the schedule delineated in the Undergraduate Catalog and will receive their bachelor's degree upon completion of all of the requirements for the undergraduate degree. The MBA degree will be awarded when the student has completed the remaining requirements for the graduate degree.

What impact will the change have on staffing, on other programs and space allocation?

No additional staffing will be required and there will be no impact on other programs or space allocation.

Answer the following Assessment questions:

a. How does the program change align with the university mission?

   This program contributes to student success by offering more opportunities for students to access an MBA degree. By providing students the opportunity to have completed 40% of the MBA requirements upon graduation with their undergraduate degree, this increases the "stackability" of degrees in the College of Business and strongly encourages students to complete the remainder of their MBA.

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

   Not applicable

c. What is the rationale for this program change?

1. How will the program change impact learning for students enrolled in this program?

   For students who are contemplating graduate studies, this program provides them the opportunity to receive 12 hours of graduate credit without delaying their undergraduate studies. This program also provides the student the opportunity to receive graduate credit while utilizing their current undergraduate financial aid.

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

   As this is a new type of program at ATU, no assessment evidence currently exists.

b. 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.

   Arkansas State University-Jonesboro (ASUJ) currently offers a similar program within the Neil Griffin College of Business. ASUJ allows students to receive up to 12 hours of graduate credit toward the Master of Accountancy degree while completing their BS – Accounting. In addition, AACSB has seen a tremendous growth in accelerated programs across colleges of business in the United States. It has proven to be successful in recruiting students into their respective graduate programs.

c. 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.)

   The program goals for the BSBA degree and the MBA degree have tremendous overlap. Both programs have the following goals: Oral Communication, Written Communication, Problem Solving, Ethics, and Business Acumen. The difference between the undergraduate and graduate programs is the level of Bloom's Taxonomy which is expected. Since the MBA program expects a 'higher' level and the artifacts in this program will be assessed at the graduate level, students in this program will be expected to meet the higher performance standard.

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.

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

Curriculum Matrix for Catalog Curriculum in_____ (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: Delete: Total Hours:
Sophomore Fall Semester Add/Change: Delete: Total Hours:	Sophomore Spring Semester Add/Change: Delete: Total Hours:
Junior Fall Semester Add/Change: Delete: Total Hours:	Junior Spring Semester Add/Change: Delete: Total Hours:
Senior Fall Semester Add/Change: Delete: Total Hours:	Senior Spring Semester Add/Change: Delete: Total Hours:

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Management and Marketing	2/20/2021

Title	Signature	Date
Department Head Kevin Mason (Interim)		2/20/2021
Dean Russ Jones	Kirk Russell Jones	7/19/2021
Assessment Christine Austin		9.27.21
Registrar		9/27/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
The current Program is Marketing Major- Digital Marketing Track. This proposal is to replace the track with a Digital Marketing major.

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. The Management and Marketing Department proposed to delete the Marketing major tracks (concentrations) of Marketing Strategy and Digital Marketing and replace them with the proposed Digital Marketing major.

2. Delete COMM 2173 Business & Professional Speaking
and Add COMM 2173 or COMM 2003

3. Change: ACCT 2003/2000 to ACCT 2004
and Reduce ~~6~~ 5 hour General Elective to ~~5~~ 3 hour Elective

4. Delete: BUAD 2053 Business Statistics
and Add STAT 2163 or PSY/SOC 2053

5. Delete: BUAD 3023 Business Communications
and Add ENGL 2053 Technical Writing

6. ~~Delete College of Business Elective 3000-4000 3 hours~~
~~and~~ Add BDA 3013 Business Spreadsheet Modeling

7. Delete College of Business Elective 3000-4000 ~~3 hours~~ 6 hours
and Add MKT Elective 3000-4000 3 hours

What impact will the change have on staffing, on other programs and space allocation?

This proposal will reduce the existing demand on Marketing faculty resources.

Answer the following Assessment questions:

a. How does the program change align with the university mission?

   This proposal fits with the mission in that the new major prepares students for success in the 21st century.

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

   Not applicable.

c. What is the rationale for this program change?
   1. How will the program change impact learning for students enrolled in this program?

      Due to financial resource restrictions, the MGMK department needs to streamline course offerings to be more efficient in course offerings.

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

      N/A

b. 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.

   This proposal aligns our marketing major with changes in the marketing discipline that have occurred with advances in technology and information analytics.

c. 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.)

   Attached

In the attached matrix, include requested changes in the matrix are as compared to the 2020/21 catalog.

Curriculum Matrix for Catalog Curriculum in _Digital Marketing Track_ (New Major: Digital Marketing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: Change COMM 2173 (Business & Professional Speaking) to COMM2173 (Business & Professional Speaking) or COMM 2003 (Public Speaking) Add: Science with Lab[1] Delete: Fine Arts & Humanities[1] Total Hours: Increase from 15 to 16
Sophomore Fall Semester Add: Fine Arts & Humanities[1] Change: ACCT 2003/2000 to ACCT 2004 Delete: Science with Lab (4 hours) Total Hours:	Sophomore Spring Semester Add STAT 2163 (Introduction to Statistical Methods) **or** PSY/SOC 2053 (Statistics for Behavior Sciences) Delete BUAD 2053 (Business Statistics) Total Hours:
Junior Fall Semester Add ENGL 2053 (Technical Writing) Add BDA 3013 (Business Spreadsheet Modeling) Delete BUAD 3023 (Business Communications) Delete College of Business Elective (3000-4000) Total Hours:	Junior Spring Semester Add MKT Elective (3000-4000) Delete College of Business Elective (3000-4000) Total Hours:
Senior Fall Semester Add/Change: Delete: Total Hours:	Senior Spring Semester Add/Change: Change/Reduce General Electives from 6 to 5 hours. Delete: Total Hours: Reduce total hours from 12 hours to 11 hours

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.

Attached are approvals from the ACCT/FIN, ENGL, MATH, Behavioral Sciences, HA and COMS departments.

MEMO

From: Kevin Mason (Interim MGMK Department Head)

Re: Phasing out existing Marketing Tracks and replace them with a Digital Marketing Major

The Management and Marketing Department will discontinue offering the Marketing major tracks (concentrations) of Marketing Strategy and Digital Marketing and replace them with the proposed Digital Marketing major. Exiting marketing majors will be encouraged to change their major to the new Digital Marketing major as the current Marketing Tracks will be phased it out by the end of May 2025. The department asks that the existing Marketing major tracks be deleted from the 2022/23 catalog.

Note from Tammy (1/25/2021) about how to proceed with this.

You don't want to create a new program proposal. It is easier to complete the Program Change form for each program. You can take the Business Management Track to update the curriculum matrix for Management and the Marketing Strategy Track to update the matrix for Marketing. You will just need a memo to delete the programs with the teach out timeline.

Academic Affairs will submit the Letter of Notification to ADHE. Thanks.

Tammy

College of Business AOL Process

Overview of the College of Business Assessment Process

1. During the Fall 2018 semester the faculty helped create the following five rubrics for the first four COB learning objectives:

a. Oral Communication – summary data to be collected in MGMT 4083

b. Written Communication – summary data to be collected in MGMT 4083; formative data in BLAW 2033

c. Technology – summary data to be collected in MGMT 4013 & ACCT 3023

d. Professionalism – summary data to be collected in BUAD 3023 (using multiple volunteers)

e. Ethics – summary data to be collected in MGMT 3123.

2. Foundational business knowledge has been assessed using the ETS Major Field Test. During the Spring 2019 semester, the faculty developed an in-house Senior Business Exam. This exam will be administered along with the ETS test for the Spring 2019 and Fall 2019 semesters to ensure the reliability of the exam. After that, only the Senior Business Exam will be administered. Formative data will also be collected in the individual business core classes.

3. The Director of Assessment's office will compile all data collected from the rubrics and the Senior Business Exam and will produce reports/charts showing the results. These will be shared with all members of the AOL/Curriculum Committee. The designated department representative on the committee will then discuss the results with his/her department to determine any corrective actions that are determined to be needed. Any curriculum proposals will be submitted to the committee; teaching techniques, change in textbooks, etc., will be implemented by the appropriate faculty.

Master Schedule of Activities to meet the Mission of the ATU College of Business

College of Business

	F2019	SP2020	F2020	SP2021	F2021	SP2022	F2022	SP2023	F2023	SP2024	F2024	SP2025	F2025	SP2026
AACSB	Visit	Update[1]									Visit			
Mission Statement			Revise[2]										Revise	
Strategic Plan	Update		Assess/Revise[2]		Implement		Update		Update		Update		Assess/Revise	
Internal Program Review	BDA		ACCT		MKT		MGMT		FIN, ECON, MBA		BDA		ACCT	

[1] - AACSB will be implementing new standards for accreditation

[2] - ATU will begin university strategic plan, mission, and vision update; COB will do the same to ensure congruence

Undergraduate

	F2019	SP2020	F2020	SP2021	F2021	SP2022	F2022	SP2023	F2023	SP2024	F2024	SP2025	F2025	SP2026
Written Comm	MGMT 4083/ BLAW 2033		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083	
Oral Comm	BLAW 2033	MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083
Ethics			MGMT 3123				MGMT 3123				MGMT 3123			
Professionalism	BUAD 3023				BUAD 3023				BUAD 3023				BUAD 3023	
Technology		MGMT 4013/ AIS 3023				MGMT 4013/ AIS 3023				MGMT 4013/ AIS 3023				MGMT 4013/ AIS 3023
ETS*	X													
Senior Business Exam	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* - The ETS will be replaced with the college's own Senior Business Exam

Graduate

	F2019	SP2020	F2020	SP2021	F2021	SP2022	F2022	SP2023	F2023	SP2024	F2024	SP2025	F2025	SP2026
Ethics			FIN 6103				FIN 6103				FIN 6103			
Oral Comm				MGMT 6903				MGMT 6903				MGMT 6903		
Technology			BDA 6203				BDA 6203				BDA 6203			
Written Comm	MGMT 6103				MGMT 6103				MGMT 6103				MGMT 6103	
ETS*	X	X	X											
Graduate Business Exam	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* - The ETS will be replaced with the college's own Graduate Business Exam

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected:	This department ☑ supports ☐ does not support the change.
Accounting, Finance and Economics	
Comments:	

Department Head Signature: Tracy Cole

Date: 3-4-21

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: Behavioral Sciences	This department does **NOT** support the change.
Comments: There are NO spaces available in our BEHV statistics classes. If BUSN students load into Behavioral Science stats classes and fill them up, it will delay the progress, and likely the graduation, of Behavioral Sciences students. If we had extra capacity in those classes, we would have already cut them and used the faculty in other content classes, where they are very much needed.	

Department Head Signature: _ 

Date: 2/25/2021

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: Computer and Information Science	This department ☒ supports ☐ does not support the change.
Comments:	

Department Head Signature: Jerry Wood

Date: 2-24-2021

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected:	This department
English and World Languages	√ supports ☐ does not support the change.
Comments:	
The Department of English and World Languages will provide seats for MGMK students who need ENGL 2053.	

Department Head Signature: _____

Date: February 25, 2021

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected:	This department
Hospitality Administration	☒ supports ☐ does not support the change.
Comments: No comments at this time - we understand the need to discontinue offering these courses.	

Department Head Signature: Cathi McMahan

Date: 2/25/21

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected:	This department ☒ supports ☐ does not support the change.
MATH	
Comments:	

Department Head Signature: Jessie L. Myers

Date: 2-25-21

ARKANSAS TECH UNIVERSITY

RECEIVED
SEP 16 2021
Registrar's Office

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
BSBA – Digital Marketing Accelerated Bachelor's Plus MBA Degree	7/15/2021

Title	Signature	Date
Department Head		
Dean	Kirk Russell Jones	7/14/2021
Assessment	Christi Austin	7.19.21
Registrar	Tammy Weaver	9/26/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
BSBA – Digital Marketing Accelerated Bachelor's Plus MBA Degree

Outline change in program:

1. This program partners the BSBA undergraduate degree with the MBA degree.
2. A maximum of 12 graduate level credit hours can be counted towards both the BSBA degree in Digital Marketing and the MBA degree.
3. Four graduate level courses can be used to replace four upper-division undergraduate courses as follows:
    - BDA 6203 can replace MGMT 4073
    - MGMT 6203 can replace MGMT 4103
    - MKT 6103 can replace MKT 4013
    - MKT 6113 can replace MKT 4103
4. Students may apply in their junior year for admission into the Digital Marketing Accelerated Bachelor's Plus MBA Degree; however, they must have completed a minimum of 90 credit hours towards the Bachelor degree and have earned a minimum GPA of 3.0 or higher in those undergraduate courses to be eligible. Once approved, the student will be conditionally admitted into the MBA program.
5. Only courses with the grade of B or better will be eligible for graduate credit
6. All other general requirements for both the BSBA-Digital Marketing and the MBA must be satisfied
7. Upon completion of the BSBA-Digital Marketing degree requirements, students will be accepted into the Graduate College at a status consistent with the Graduate College and individual program guidelines.
8. Students must meet all of the graduate requirements for dual credit courses to receive graduate credit for these courses to contribute toward their MBA degree.
9. Students in this program will apply for graduation with the BSBA-Digital Marketing degree on the schedule delineated in the Undergraduate Catalog and will receive their bachelor's degree upon completion of all of the requirements for the undergraduate degree. The MBA degree will be awarded when the student has completed the remaining requirements for the graduate degree.

What impact will the change have on staffing, on other programs and space allocation?

No additional staffing will be required and there will be no impact on other programs or space allocation.

Answer the following Assessment questions:

a. How does the program change align with the university mission?

This program contributes to student success by offering more opportunities for students to access an MBA degree. By providing students the opportunity to have completed 40% of the MBA requirements upon graduation with their undergraduate degree, this increases the "stackability" of degrees in the College of Business and strongly encourages students to complete the remainder of their MBA.

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

Not applicable

c. What is the rationale for this program change?

1. How will the program change impact learning for students enrolled in this program?

For students who are contemplating graduate studies, this program provides them the opportunity to receive 12 hours of graduate credit without delaying their undergraduate studies. This program also provides the student the opportunity to receive graduate credit while utilizing their current undergraduate financial aid.

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

As this is a new type of program at ATU, no assessment evidence currently exists.

b. 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.

Arkansas State University-Jonesboro (ASUJ) currently offers a similar program within the Neil Griffin College of Business. ASUJ allows students to receive up to 12 hours of graduate credit toward the Master of Accountancy degree while completing their BS – Accounting. In addition, AACSB has seen a tremendous growth in accelerated programs across colleges of business in the United States. It has proven to be successful in recruiting students into their respective graduate programs.

c. 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.)

The program goals for the BSBA degree and the MBA degree have tremendous overlap. Both programs have the following goals: Oral Communication, Written Communication, Problem Solving, Ethics, and Business Acumen. The difference between the undergraduate and graduate programs is the level of Bloom's Taxonomy which is expected. Since the MBA program expects a 'higher' level and the artifacts in this program will be assessed at the graduate level, students in this program will be expected to meet the higher performance standard.

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.

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

Curriculum Matrix for Catalog Curriculum in_____ (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: Delete: Total Hours:
Sophomore Fall Semester Add/Change: Delete: Total Hours:	Sophomore Spring Semester Add/Change: Delete: Total Hours:
Junior Fall Semester Add/Change: Delete: Total Hours:	Junior Spring Semester Add/Change: Delete: Total Hours:
Senior Fall Semester Add/Change: Delete: Total Hours:	Senior Spring Semester Add/Change: Delete: Total Hours:

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ARKANSAS TECH UNIVERSITY

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SEP 16 2021
Registrar's Office

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Management and Marketing	4-20-21

Title	Signature	Date
Department Head **Kevin Mason**		
Dean **Russ Jones**		7/21/21
Assessment		7/21/21
Registrar	Tammy Queen	8/27/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Associate of Business Administration

9-16-21

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)
Change ACCT 2003 to ACCT 2004. Delete ACCT 2000. Change BUAD 2053 to STAT 2173 or PSY/SOC 2053. Change Electives from 3 hours to 2 hours. Change COMM 2173 to (COMM 2003 or COMM 2173)

What impact will the change have on staffing, on other programs and space allocation?
This proposal will reduce the existing demand on BDA faculty resources.

Answer the following Assessment questions:

a. How does the program change align with the university mission?
This proposal fits with the mission in that the new major prepares students for success in the 21st century.
b. If this change in the program is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable.
Not applicable.
c. What is the rationale for this program change?
    1. How will the program change impact learning for students enrolled in this program?
Due to financial resource restrictions, the MGMK department needs to streamline course offerings to be more efficient in course offerings.
    2. Provide an example or examples of student learning assessment evidence which supports the changes in the program.
Not applicable.
b. 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.
This proposal improves efficiency without otherwise impacting our ABA major.
c. 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.)
Attached

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Attached

RECEIVED

JUL 22 2021

Registrar's Office

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)

Change ACCT 2003 to ACCT 2004. Delete ACCT 2000. Change BUAD 2053 to STAT ~~2173~~ 2163 or PSY/SOC 2053. Change Electives from ~~2~~ 3 hours to ~~1~~ 2 hour.

What impact will the change have on staffing, on other programs and space allocation?

This proposal will reduce the existing demand on BDA faculty resources.

Answer the following Assessment questions:

a. How does the program change align with the university mission?
This proposal fits with the mission in that the new major prepares students for success in the 21st century.

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

c. What is the rationale for this program change?
   1. How will the program change impact learning for students enrolled in this program?
   Due to financial resource restrictions, the MGMK department needs to streamline course offerings to be more efficient in course offerings.
   2. Provide an example or examples of student learning assessment evidence which supports the changes in the program.

Not applicable.

b. 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.
This proposal improves efficiency without otherwise impacting our ABA major.

c. 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.)
Attached

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.

Attached

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

Curriculum Matrix for Catalog Curriculum in_____ (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Change: **COMM 2173 to (COMM 2003 or COMM 2173)** Delete: Total Hours:
Sophomore Fall Semester Add: **STAT 2163 (Introduction to Statistical Methods) or PSY/SOC 2053** Change: **ACCT 2003/2000 to ACCT 2004** Delete: **BUAD 2053 (Business Statistics)** Total Hours: **Increase total hours from 15 to 16.**	Sophomore Spring Semester Change: **Electives from 2 to 1 hour** Delete: Total Hours: **Decrease total hours from 15 to 14.**

College of Business AOL Process

Overview of the College of Business Assessment Process

1. During the Fall 2018 semester the faculty helped create the following five rubrics for the first four COB learning objectives:

a. Oral Communication – summary data to be collected in MGMT 4083

b. Written Communication – summary data to be collected in MGMT 4083; formative data in BLAW 2033

c. Technology – summary data to be collected in MGMT 4013 & ACCT 3023

d. Professionalism – summary data to be collected in BUAD 3023 (using multiple volunteers)

e. Ethics – summary data to be collected in MGMT 3123.

2. Foundational business knowledge has been assessed using the ETS Major Field Test. During the Spring 2019 semester, the faculty developed an in-house Senior Business Exam. This exam will be administered along with the ETS test for the Spring 2019 and Fall 2019 semesters to ensure the reliability of the exam. After that, only the Senior Business Exam will be administered. Formative data will also be collected in the individual business core classes.

3. The Director of Assessment's office will compile all data collected from the rubrics and the Senior Business Exam and will produce reports/charts showing the results. These will be shared with all members of the AOL/Curriculum Committee. The designated department representative on the committee will then discuss the results with his/her department to determine any corrective actions that are determined to be needed. Any curriculum proposals will be submitted to the committee; teaching techniques, change in textbooks, etc., will be implemented by the appropriate faculty.

Master Schedule of Activities to meet the Mission of the ATU College of Business

College of Business

	F2019	SP2020	F2020	SP2021	F2021	SP2022	F2022	SP2023	F2023	SP2024	F2024	SP2025	F2025	SP2026
AACSB	Visit	Update[1]									Visit			
Mission Statement			Revise[2]										Revise	
Strategic Plan	Update		Assess/Revise[2]		Implement		Update		Update		Update		Assess/Revise	
Internal Program Review	BDA		ACCT		MKT		MGMT		FIN, ECON, MBA		BDA		ACCT	

[1] - AACSB will be implementing new standards for accreditation

[2] - ATU will begin university strategic plan, mission, and vision update; COB will do the same to ensure congruence

Undergraduate

	F2019	SP2020	F2020	SP2021	F2021	SP2022	F2022	SP2023	F2023	SP2024	F2024	SP2025	F2025	SP2026
Written Comm	MGMT 4083/ BLAW 2033		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083	
Oral Comm	BLAW 2033	MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083		MGMT 4083
Ethics			MGMT 3123				MGMT 3123				MGMT 3123			
Professionalism	BUAD 3023				BUAD 3023				BUAD 3023				BUAD 3023	
Technology		MGMT 4013/ AIS 3023				MGMT 4013/ AIS 3023				MGMT 4013/ AIS 3023				MGMT 4013/ AIS 3023
ETS*	X													
Senior Business Exam	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* - The ETS will be replaced with the college's own Senior Business Exam

Graduate

	F2019	SP2020	F2020	SP2021	F2021	SP2022	F2022	SP2023	F2023	SP2024	F2024	SP2025	F2025	SP2026
Ethics			FIN 6103				FIN 6103				FIN 6103			
Oral Comm				MGMT 6903				MGMT 6903				MGMT 6903		
Technology			BDA 6203				BDA 6203				BDA 6203			
Written Comm	MGMT 6103				MGMT 6103				MGMT 6103				MGMT 6103	
ETS*	X	X	X											
Graduate Business Exam	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* - The ETS will be replaced with the college's own Graduate Business Exam

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Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected:	This department does **NOT** support the change.
Behavioral Sciences	

Comments:

There are NO spaces available in our BEHV statistics classes. If BUSN students load into Behavioral Science stats classes and fill them up, it will delay the progress, and likely the graduation, of Behavioral Sciences students. If we had extra capacity in those classes, we would have already cut them and used the faculty in other content classes, where they are very much needed.

Department Head Signature: David Ward

Date: 2/25/2021

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected:	This department √ supports ☐ does not support the change.
English and World Languages	
Comments: The Department of English and World Languages will provide seats for MGMK students who need ENGL 2053.	

Department Head Signature: Carl Bunderson

Date: February 25, 2021

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected:	This department ☒ supports ☐ does not support the change.
MATH	
Comments:	

Department Head Signature: Jennifer L. Myers

Date: 2-25-21

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Management and Marketing	4-19-21

Title	Signature	Date
Department Head Kevin Mason	Kevin Mason	04/19/2021
Dean Russ Jones	Kirk Russell Jones	4/19/2021
Assessment		7/21/21
Registrar	Tammy Treadaway	8/27/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Minor in Business and Entrepreneurship

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Registrar's Office

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)

In the list of required courses for this minor:
(1) Delete ACCT 2003 Accounting Principles I
(2) Add "ACCT 2004 Accounting Principles I or ACCT 2033 Accounting for Non-Business Majors"

What impact will the change have on staffing, on other programs and space allocation?

None

Answer the following Assessment questions:

a. How does the program change align with the university mission? ***This change will promote student success by making the minor in Business and Entrepreneurship more accessible to students in majors outside of the College of Business by allowing them some flexibility in meeting the accounting course requirement.***

b. If this change in the program is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable. ***Not applicable.***
What is the rationale for this program change? ***See a. above.***
   1. How will the program change impact learning for students enrolled in this program?
   2. Provide an example or examples of student learning assessment evidence which supports the changes in the program.

b. 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. ***Not applicable to minors.***

c. 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.) ***Not applicable to minors.***

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.
Not applicable to minors.

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ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Management and Marketing	4-19-21

Title	Signature	Date
Department Head Kevin Mason	Kevin Mason	04/19/2021
Dean Russ Jones	Kirk Russell Jones	4/19/2021
Assessment		7/21/21
Registrar	Tammy Weaver	8/27/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Minor in General Business

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) Change the name of the minor from "General Business" to "Business Administration"
(2) In the list of required courses for this minor:
  (a) Delete ACCT 2003 Accounting Principles I
  (b) Add "ACCT 2004 Accounting Principles I or ACCT 2033 Accounting for Non-Business Majors"

What impact will the change have on staffing, on other programs and space allocation?

None

Answer the following Assessment questions:

a. How does the program change align with the university mission? ***This change will promote student success by making the minor more accessible to students in majors outside of the College of Business by allowing them some flexibility in meeting the accounting course requirement. Changing the name from General Business to Business Administration will more accurately reflect the content and purpose of the minor.***

b. If this change in the program is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable. ***Not applicable.***
What is the rationale for this program change? ***See a. above.***
  1. How will the program change impact learning for students enrolled in this program?
  2. Provide an example or examples of student learning assessment evidence which supports the changes in the program.

b. 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. ***Not applicable to minors.***

c. 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.) ***Not applicable to minors.***

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.
Not applicable to minors.

ARKANSAS TECH UNIVERSITY

REQUEST FOR COURSE DELETION

Department Initiating Proposal	Date
Department of History and Political Science	7/21/2022

Title	Signature	Date
Department Head		23 July 2021
Dean		9/6/21
Assessment		9.3.21
Registrar		9/15/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Course Subject: (e.g., ACCT, ENGL)	Course Number: (e.g., 1003)
HIST	**3291**

Official Catalog Title:

Practicum in Public History

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SEP 07 2021

Registrar's Office

Is this course cross-listed with another existing course? If so, list course subject and number.

☐ Yes ☒ No

Will the cross-listed course be deleted? ☐ Yes ☒ No

(NOTE: If major or minor course, you must complete the Request for Program Change form to delete course from program.)

Answer the following Assessment questions:

a. If this course is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable. NOT APPLICABLE

b. If this course was required for the major or minor, complete the following. How will program level learning outcome(s) previously addressed by this course now be addressed? This course was previously required by the Public History major. When the major was created, this was a one credit course designed to give students experience working in the museum environment. Students wanting practical museum experience are still able to take HIST/MUS/ANTH 4403 for an opportunity to gain experience in a museum. It was not essential by itself to fulfill a program level learning outcome.

c. What is the rationale for deleting this course? What evidence supports this action? When the program was initially created, we asked for far too much from the students when compared to comparable programs. Our internship requirement included a 300 hour requirement. We have lowered that to 120, the "Carnegie Unit." Additionally, of the other sub-fields for which we have courses, namely historic preservation, archives, digital history, local history, and oral history, museums was the only sub-field privileged with what is essentially a lab. Finally, university administration elected to close the campus museum and divide the time of the museum director between departments reducing his ability to lead projects that would be appropriate for students to complete in a one-credit course. Students who have a specific interest in museum work have been placed in regional museums for their mandatory internship.

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.

NOTE: This deletion will be effective at the end of the spring term of the current catalog year.

ARKANSAS TECH UNIVERSITY

REQUEST FOR COURSE CHANGE

Department Initiating Proposal	Date
Department of History and Political Science	8/23/2021

Title	Signature	Date
Department Head		23 Aug 2021
Dean		9/6/21
Assessment		9.3.21
Registrar	Tammy Weaver	9/15/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Course Subject: (e.g., ACCT, ENGL)	Course Number: (e.g., 1003)
HIST	**3273**

Official Catalog Title:

Digital History

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Registrar's Office

Is this course cross-listed with another existing course? If so, list course subject

and number.

○Yes ◉No

Request to change: (check appropriate box):

☐Course Number	☐Title	☒Course Descri...
☐Cross-Listing	☐Prerequisite	☐Co-requisite
☐Grading	☐Fee	
☐Other		

NOTES: These changes will become effective in the Summer I Term of the new catalog year. If this course is cross-listed, a prerequisite/co-requisite, or included in the course description of other courses, a Course Change must be submitted to address all changes in related courses.

New Course Number: (e.g., 1003)

No Change

New Official Catalog Title: (If official title exceeds 30 characters, indicate Banner Title below)

No Change

Banner Title: (limited to 30 characters, including spaces, capitalize all letters - this will display on the transcript)

Digital History

New Course Description:
Course discusses the theoretical and practical impact of new media and technology on the study of history, especially in the field of Public History. It examines how digital media has influenced and is still influencing how we research, write, present, and teach history to a diverse audience.

New Cross List:

☐Adding Cross-Listi...	☐Changing Cross-Lis...	☐Deleting Cross-Lis...

If adding or changing cross-listing, indicate course subject and number

New Prerequisite (list all, as you want them to appear in the catalog):

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SEP 07 2021

New Co-requisite (list all, as you want them to appear in the catalog):

☒Elective	☒Major	☐Minor

(If major or minor course, you must complete the Request for Program Change form to add course to program.)

Answer the following Assessment questions:

a. If this course is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable. **NOT APPLICABLE**

b. If this course is required for the major or minor, complete the following.
   a. Provide the program level learning outcome(s) it addresses.
   Course directly contributes to SLO 1a 2, and 3: 1a. "Demonstrate the ability to think historically by showing the ability to: a. Gather, analyze, evaluate, and integrate relevant information and draw

informed and reasonable conclusions about that data." 2. "Demonstrate an understanding of the core concepts of the sub-fields of public history." 3. "Demonstrate the skills and knowledge of public history concepts through mediums particular to each sub-field."

b. Provide tool or measure directly linked to each program learning outcome. (How will student learning in this outcome be measured?) The course level objectives that support the system level objectives are as follow. Discover, evaluate, and implement digital tools and resources to support emerging and traditional forms of historical scholarship, public projects, and teaching. Thoughtfully and purposefully engage in dialog about history on the public web with a range of stakeholders in digital history: historians, archivists, museum professionals, educators, and amateurs, etc. Understand copyright, Creative Commons, and the public domain, and use create and share resources/intellectual property appropriately.

c. What is the rationale for adding this course? What evidence supports this action? This course is not new. It has been taught yearly for the last six years. It just needs a catalog description that is more informative than "This is an experimental course." It is needed for the Public History Program and the History Program to introduce students to new approaches to the study of history. It is the way we bridge the gap between the skills of traditional historians and the possibilities presented by technology.

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.

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Registrar's Office

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SEP 07 2021
Registrar's Office

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Department of History and Political Science	22 Aug 2021

Title	Signature	Date
Department Head		23 Aug 2021
Dean		9/23/21
Assessment		9/3/21
Registrar	Tammy Weaver	9/15/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:	RECEIVED
Public History	SEP 07 2021

Registrar's Office

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 required courses:
HIST 3223: Local and Oral History
HIST 3243: Archive and Manuscript Management
HIST 3281: Grant Writing for Historians
HIST 3283: Historical Editing
HIST 3291: Practicum in Public History
HIST 4293: Historic Preservation
HIST 4143: Native American History
HIST/ANTH/MUSM 4403: Interpretation/Education through Museum Methods

(2) Select 9 hours of Public History Core from the following list:
HIST 3223: Local and Oral History
HIST 3243: Archive and Manuscript Management
HIST 3273: Digital History
HIST 4293: Historic Preservation
HIST/ANTH/MUSM 4403: Interpretation/Education through Museum Methods

(3) Add 3 hours to the European/World History requirements (6 hours to 9 hours)

(4) Add 3 hours to the U.S. History requirements (6 hours to 9 hours)

(5) Change GEOG 3803: Historical Geography, or GEOG 4203: Place and Collective Memory, to 3 hours of 3000-4000 level GEOG Elective

(6) Add 6 hours of 3000-4000 level HIST Electives

(7) Delete one hours of Elective

8) Update Introductory Section of major

What impact will the change have on staffing, on other programs and space allocation?
The only change is that it will actually be easier to teach all required classes with existing staff. There will be not change in the delivery of HIST 2203 and 3273 which are required for the History degree.

Answer the following Assessment questions:

a. How does the program change align with the university mission?
The proposed changes align with the university mission in several ways. It supports student success by reducing the number of required hours for both the program as a whole and the number of hours required for the internship. This frees students to pursue other interests while still giving them a solid foundation in Public History. It increases access because not all five of the core upper division courses are available online. These changes will allows students to complete every required course except for the internship online. The program in its current state is already designed to further the university's mission. These changes will increase its ability to do so.

b. If this change in the program is mandated by an accrediting or certifying

agency, include the directive. If not, state not applicable. Not applicable.

c. What is the rationale for this program change?
   1. How will the program change impact learning for students enrolled in this program? Students will have more time to pursue other academic interests and goals. For example, one of the reasons for the proposed changes is so students can easily complete both the History and Public History degrees in four years, making them stackable. The reduction of hours required for the internship to what is essentially the industry standard will reduce a time burden students have experienced in finishing the program.
   2. Provide an example or examples of student learning assessment evidence which supports the changes in the program. Students reports of their internships have reinforced the need for the reduction of hours. Encouragement from the Dean to reduce the complexity of our programs is another factor.

b. 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. According to research done by the program director and the comments of our program reviewers, these changes will put us in line with current discipline standards.

c. 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.) The new assessment plan, which has already been approved by the head of assessment, it attached to this form.

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.

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

Curriculum Matrix for Catalog Curriculum in PUBLIC HISTORY	
Freshman Fall Semester No Change Total Hours: 16 hours	Freshman Spring Semester No Change Total Hours: 16 hours
Sophomore Fall Semester No Change Total Hours: 15 hours	Sophomore Spring Semester No Change Total Hours: 15 hours
Junior Fall Semester Add: 3 hours of 3000-4000 level GEOG Elective 3 hours of Public History Core Footnote 6 3 hours of 3000-4000 level HIST Elective Delete: GEOG 3803 Historical Geography OR GEOG 4203 Place and Collective Memory HIST 3223 Local and Oral History HIST 4143 Native American History Total Hours: 15 hours	Junior Spring Semester Add: 3 hours of Public History Core Footnote 6 Change: HIST Electives4 from 3 hours to 6 hours Delete: HIST 3283 Historical Editing HIST 3291 Practicum in Public History HIST/ANTH/MUSM 4403 Interpretation/ Education through Museum Methods Total Hours: 15 hours
Senior Fall Semester Add: 3 hours of Public History Core Footnote 6 3 hours of 3000-4000 level HIST Elective Change: HIST Elective3 from 3 hours to 6 hours Electives from 5 hours to 4 hours Delete: HIST 3243 Archive and Manuscript Management HIST 3281 Grant Writing for Historians HIST 4293 Historic Preservation Total Hours: 16 hours	Senior Spring Semester No Change Total Hours: 12 hours

Footnote 6: Nine hours must be in the Public History Core – HIST 3223 Local and Oral History, HIST 3243 Archive and Manuscript Management, HIST 3273 Digital History , HIST

4293 Historic Preservation, or HIST/ANTH/MUSM 4403 Interpretation/Education through Museum Methods

Department of History and Political Science
Catalog Change Proposal (2020-2021)
Subject: Revision of Public History Major

July 2021

Overview

We propose two major changes to the Public History degree: a revision of the student learning outcomes (SLOs), and a reduction of the number of courses required to complete the program.

Description

Part I

It is proposed that the SLOs for the program be revised as follows:

Students completing the Public History BA will:

1. Demonstrate the ability to think historically by showing the ability to:
    a. Gather, analyze, evaluate, and integrate relevant information and draw informed and reasonable conclusions about that data.
    b. State and adequately defend a hypothesis or thesis using appropriate data and acceptable citations.
2. Have an understanding of the core concepts of the subfields of public history
3. Demonstrate the skills and knowledge of public history concepts through mediums particular to each subfield.
4. Develop a habit of life-long learning as an informed, active, and engaged citizen.

Course specific student learning outcomes

Program Goal/Objective	Course Learning Outcomes	Assessment Methods and Criteria
1. Local History Research Methods	A. Demonstrate ability to conduct primary source research.	A. Students produce paper based on original primary source research – score 70% or higher

	B. Plan, produce, and properly document an oral history interview.	B. Students will complete an oral history project according to the rubric and achieve a 70% or higher.
2. Archival Theory	A. Demonstrate ability to utilize Dublin Core Metadata Standards	A. 70% or higher on metadata quiz
	B. Show mastery of core archival principles	B. Contribute minimum ten properly completed entries in class archive project
3. Historic Preservation	A. Apply National Register evaluation criteria.	A. 70% or higher on six criteria evaluation blog posts.
	B. Produce a compliant National Register of Historic Places nomination.	B. 70% or higher on complete National Register nomination.
4 Museum Theory	A. Demonstrate mastery of museum admin practices, care of collections, interpretation, and programming.	A. Completion of HIST/ANTH 4403 with a "C" or higher.
5. Digital History	A. Demonstrate ability to produce an effective grant proposal.	A. 70% or higher on effective and complete grant proposal.
	B. Demonstrate a	B. Students

basic understanding of XML	produce valid XML transcription project with a grade of 70% or higher.

Part II

The second part relates to the courses required for the program. These changes will increase the ability of students to graduate in a timely manner and will make the Public History requirements comparable to History requirements at ATU and reflect general trends in the field. These changes will also make it easier for Public History students to pursue other interests or degrees while undergraduates at ATU.

	Proposed Public History Change Matrix		
Old Catalog		Proposed Changes	
			3 of 5 in this column
	General Education Requirements		
HIST 1503	World History to 1500	HIST 1503	
HIST 1513	World History since 1500	HIST 1513	
HIST 2003	United States History to 1877	HIST 2003	
HIST 2013	United States History since 1877	HIST 2013	
	Non-HIST Courses		
POLS 2003	American Government	POLS 2003	
ANTH 2003	Cultural Anthropology	ANTH 2003	
GEOG 3803 or 4203	Historical Geography **OR** Place and Collective Memory	Any UD GEOG 3cr.	
	HIST Core Courses		
HIST 2203	Introduction to Public History	HIST 2203	
HIST 2513	Sources and Methods in History	HIST 2513	
HIST 3223	Local and Oral History		HIST 3223

HIST 3281	Grant Writing for Historians		
HIST 3243	Archive and Manuscript Management		HIST 3243
HIST 3273	Digital History		HIST 3273
HIST 3283	Historical Editing		
HIST 3291	Practicum in Public History		
HIST 4153	History of Arkansas	HIST 4153	
HIST 4143	Native American History		
HIST 4293	Historic Preservation		HIST 4293
HIST 4403	Museum Methods		HIST 4403
HIST 4973	Internship	HIST 4973	
6 Credits	6 Hours Upper Div. U.S. History	6 Credits	
6 Credits	6 Hours Upper Div. World/Euro. History	6 Credits	
Total=53 Cr.		Total = 42 Credits	

Breakdown of Changes

HIST 2203, 2513, and 4153 will continue to be required as they are required by both Public History and History. The core of the upper division courses will be comprised of the following courses.

HIST 3223 - Local and Oral History
HIST 3243 - Archive & Manuscript Management
HIST 3273 - Digital History
HIST 4293 - Historic Preservation
HIST 4403 - Museum Methods
HIST 4973 - Internship

HIST 4973 will continue to be required for all students. Of the five remaining courses, HIST 3223, 3243, 3273, 4293, and 4403, students will be required to take three. The following courses will be removed from the degree:

HIST 3281 - Grant Writing for Historians
HIST 3283 - Historical Editing

HIST 3291 - Practicum
HIST 4143 - Native American History

These changes will reduce the number of required credits by eleven. This will mean that the Public History and History degrees will both require 42 credit hours for each program.

We propose two other changes. One is to replace the requirement to take GEOG 3803 or 4203 with the requirement to take any upper division Geography course. This will greatly increase the flexibility of students in fulfilling that requirement. The second is to reduce the number of hours required for the internship from 300 to 120. This would reduce the burden of time for students. It also would bring us in line with most other institutions' requirements for internship hours. The 120 hours is based on the Carnegie Unit.

Justification

These changes are made in accordance with suggestions made by program reviewers, the practices of similar institutions, and the wisdom drawn from the last seven years of program operation. Specific justifications are as follows:

- HIST 3281 has only been taught once in the last eight years. In addition, the final project in HIST 3273 – Digital History – is a grant proposal, so students still get instruction on how to complete a grant proposal.
- HIST 3282 has not been taught since the current program director started at ATU in 2012. It was taught by a professor who is no longer with the university.
- HIST 3291 is made redundant by requiring HIST 4403. Our museums class already requires a significant amount of time in hands-on experience.
- HIST 4143. The course is not directly related to the core of public history.

Additional Resources Needed

None

Assessment Plan

The faculty within the Public History program revised the program's assessment objectives in 2016 to bring them more in line with the University's updated mission. They are as follows:

- **Museum Science Content Objective:** Students completing a degree in Public History will have an understanding of core concepts in museum studies.

- **History Content Objective:** The student will experience an immersion in historical reasoning and knowledge of the past that includes an understanding of the development of human society and culture, as well as the interrelationships between causation and change.
- **Archive Management Content Objective:** Students completing a degree in Public History will have an understanding of core concepts in archival management.
- **Historic Preservation Content Objective:** Students completing a degree in Public History will have an understanding of core concepts in historic preservation.

The faculty also established two Application Objective and one Attitudinal Objective, as follows:

- **Application – Applied Field:** Students completing the public history program will demonstrate skills and knowledge in an applied field of public history (i.e., museum studies, historic preservation, or archival management).
- **Application - Presentation:** Students completing a degree in Public History will demonstrate the ability to present history in a public forum through such methods as museum exhibits, preservation of history, and management of archives.
- **Attitudinal:** Students in the public history program will develop a habit of life-long learning as an informed, active and engaged citizen.

In conjunction with the Office of Assessment & Institutional Effectiveness, these objectives are keyed to specific assignments and course completion by students. As the archive management and the historic preservation content objectives could run afoul of our proposal to only require three of five of some core classes, these objectives will be revised once the proposed program changes are approved.

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
History and Political Science	3/30/2021

Title	Signature	Date
Department Head David Blanks		5/12/21
Dean		5/12/2021
Assessment **Dr. Christine Austin**		**5.13.2021**
Registrar		9/15/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Change in the Catalogue of BA History related to the Accelerated BA/MA degree in history

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)

Change Footnote 7 in the Curriculum Matrix for Catalog of BA in History from

"Students can take up to 6 credit hours at the 5000-level and 6000-level that can count as 4000-level courses. Two graduate-level courses, HIST 6033 Readings in US History and HIST 6543 Readings in World History, can be used to replace two upper-division undergraduate electives, either US history, or world history, to fulfill the requirements for a BA degree in history."

to

"Any graduate courses at the 5000 and 6000 level can be used to substitute any 4000-level undergraduate course."

What impact will the change have on staffing, on other programs and space allocation?

No

Answer the following Assessment questions:

a. How does the program change align with the university mission?
b. If this change in the program is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable.
c. What is the rationale for this program change?
    1. How will the program change impact learning for students enrolled in this program?
    2. Provide an example or examples of student learning assessment evidence which supports the changes in the program.
b. 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.
c. 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.)

~~Please see the original accelerated BA/MA program in history approved on November 17, 2020~~

See attached portion of previous BA/MA program change form addressing assessment questions as attached by Office of Assessment & IE.

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.

~~catalog and will receive their bachelor's degree upon completion of all the requirements for the undergraduate degree. The Master's degree will be awarded when the student has completed the remaining requirements for the graduate degree.~~

~~What impact will the change have on staffing, on other programs and space allocation?~~
~~None.~~

Answer the following Assessment questions:

a. How does the program change align with the university mission?
This program contributes to Tech's dedication to "student success." By offering more opportunities for students to access an MA degree, this program "inspires and empowers members of the community." Training more people with advanced degrees also serves for the betterment of "Arkansas, the nation, and the world"

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

c. What is the rationale for this program change?
   1. How will the program change impact learning for students enrolled in this program?
   For undergraduate students who plan to go to the graduate program at Tech, having six credit hours that count toward both BA and MA degrees would save them one semester of study time and a portion of their tuition. It also gives senior-level undergraduate students access to the graduate study without delaying their graduation schedule.

   2. Provide an example or examples of student learning assessment evidence which supports the changes in the program.
   This is a new program. We do not have any learning assessment evidence yet.

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.

Arkansas State University Jonesboro (ASUJ) offers many accelerated Masters programs and the History MA program is one of them. ASUJ allows up to 12 hours of graduate credit that can also apply toward completion of the undergraduate degree requirements. Under their accelerated master's degree option, a student will be fully admitted to the graduate program upon completion of the baccalaureate degree. This dual counting of a course for both undergraduate and graduate credit will occur only after the student completes the baccalaureate degree. Only courses with grades B or better will be eligible to count toward graduate credit.

ASUJ's MA history program requires 33 hours of graduate history credit, has no foreign language requirement, relies heavily on 6000-level "readings" and "seminar" courses, offers both a thesis option (27 hours of coursework and 6 hours of thesis) and a non-thesis option (33 hours of coursework and comprehensive exams), and offers

three areas of study: United States, global, and public history. ATU's History MA program is similar to ASUJ's in size, role, and scope. We can introduce this program to increase our own competitiveness in graduate recruiting.

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.)

We will make the following changes to the Undergraduate Catalogue

1. To the existing 6 footnotes, no. 7 is added with the following wording: "Students can take up to 6 credit hours at the 5000-level and 6000-level that can count as 4000-level courses."
2. In the degree matric of the senior year, footnote no.2 that goes with "elective" in both spring and fall semesters would be changed to "2,7."

Students who enrolled in the BA/MA accelerated program will get their BA and MA degrees at the same time. This change will not substantially affect the graduation rate of the BA degree because starting from the third year, the number of students who get both degrees will be counted into the BA degree graduation rate, which will stabilize after that. Also, we are expecting 2-3 undergraduate students per year to choose the BA/MA accelerated program, which is less than 5% of our 70 total BA graduates annually. Moreover, since students who choose this track would be among the strongest, they would have no problem graduating.

We will continue to assess the two programs separately because their requirements are different.

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.

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

Curriculum Matrix for Catalog Curriculum in Accelerated BA History to MA History (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: Delete: Total Hours:
Sophomore Fall Semester Add/Change: Delete: Total Hours:	Sophomore Spring Semester Add/Change: Delete: Total Hours:
Junior Fall Semester Add/Change: Delete: Total Hours:	Junior Spring Semester Add/Change: Delete: Total Hours:
Senior Fall Semester Add/Change: Delete: Total Hours:	Senior Spring Semester Add/Change: Delete: Total Hours:

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Electrical Engineering	6/29/2021

Title	Signature	Date
Interim Department Head Carl Greco		6/29/2021
Dean Judy Cezeaux		6/29/2021
Assessment Christine Austin		7.7.2021
Registrar		9/7/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Electrical Engineering Biomedical Engineering Option

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)
Replace COMS 2903: Discrete Structures for Technical Majors OR MATH 2703: Discrete Mathematics. with MATH 2703 only. The Computer Information Sciences Department will no longer offer COMS 2903 and has replaced it with MATH 2703 in their curricula and change COMS 2104 to COMS 1013 and 1011.

What impact will the change have on staffing, on other programs and space allocation?
This will increase class sizes or potentially require an additional section of MATH 2703.

Answer the following Assessment questions:

a. How does the program change align with the university mission?
   The change will continue to provide the knowledge of discrete math as required by the accrediting agency, ABET, for the computer engineering degree to facilitate "student success" and "intellectual development" which will allow the students to achieve their goals.
b. If this change in the program is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable.
   ABET requires discrete mathematics for the computer engineering degree. [https://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-engineering-programs-2020-2021/]
c. What is the rationale for this program change?
   1. How will the program change impact learning for students enrolled in this program?
      The replacement of COMS 2903 with MATH 2703 will continue to provide the knowledge and understanding required to be successful as a computer engineer.
   2. Provide an example or examples of student learning assessment evidence which supports the changes in the program.
      ABET, the program accrediting agency, requires discrete math for a computer engineering program. This change replaces one course with another that covered the same topics and will not require a change to the assessment processes.
b. 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.
   MATH 2703 meets the requirement for computer engineering degree program as mandated by ABET.
c. 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.)

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.

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

Curriculum Matrix for Catalog Curriculum in Bachelor of Science in Electrical Engineering with Biomedical Option (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: Delete: Total Hours:
Sophomore Fall Semester Add/Change: Delete: COMS 2903 Total Hours:	Sophomore Spring Semester Add/Change: COMS 1013 COMS 1011 Delete: COMS 2104 Total Hours: 14
Junior Fall Semester Add/Change: Delete: Total Hours:	Junior Spring Semester Add/Change: Delete: Total Hours:
Senior Fall Semester Add/Change: Delete: Total Hours:	Senior Spring Semester Add/Change: Delete: Total Hours:
Total Program Hours 122	

Assessment Plan

1. Program Mission

The mission of the Department of Electrical Engineering at Arkansas Tech University is to develop and educate students to become electrical or computer engineers exhibiting professional competency and ethics, with a desire for life-long learning.

In order to fulfill its mission, the department has established the following educational objectives.

Graduates of the Arkansas Tech University Computer and Electrical Engineering degree programs, within a few years of graduating, will have

- Obtained employment in an engineering or closely-related field, or entered a graduate program in engineering or a related field or gained admission to a professional program such as medicine, law or business.
- Solved problems aided by the engineering proficiencies they learned in their undergraduate program.
- Recognized a pathway to make positive contributions to society using their engineering talents and skills by practicing their profession in an ethical and responsible manner.
- Engaged in continuing education and pursuit of membership in professional societies as well as FE/PE certification, or other certifications relevant to their chosen occupational field.
- Demonstrated accountability and worked effectively in a team environment with strong emphasis on multidisciplinary membership, inclusion, and communication.

2. Student Learning Outcomes – ABET

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

3. SLOs targeted with current Program Change

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

4. Measure of Effectiveness

For SLO 1.) students are expected to solve and identify a complex engineering program. ABET defines a complex engineering problem as: "Complex engineering problems include one or more of the following characteristics: involving wide-ranging or conflicting technical issues, having no obvious solution, addressing problems not encompassed by current standards and codes, involving diverse groups of stakeholders, including many component parts or sub-problems, involving multiple disciplines, or having significant consequences in a range of contexts." These engineering problems are also expected to contain "College-Level Mathematics" which is defined as "mathematics that requires a degree of mathematical sophistication at least equivalent to that of introductory calculus. For illustrative purposes, some examples of college-level mathematics include calculus, differential equations, probability, statistics, linear algebra, and ***discrete mathematics***." Therefore, it will be essential to collect data in courses where discrete mathematics is used including ELEG 2130 and ELEG 2134.

5. Listing of courses that will have assessment impacted due to program change

ELEG 2134 Digital Logic Design (SLO 1)

ELEG 2130 Digital Logic Design Lab (SLO 1)

Each of the above courses is identified to have course objectives that are linked to one or more student learning outcomes where college-level mathematics is used. It is expected that examples of students practicing mathematics will need to be collected from these courses.

6. Performance standards or criteria for success which demonstrate student learning for each outcome

The successful student should be able to:
1. ***Take a Boolean expression and minimize it using basic theorems and graphical/tabular techniques.***

2. ***Convert numbers from one base to another.***

3. Design minimal and/or hazard free combinational and sequential circuits at the gate level.

4.Design circuits that can add, subtract, multiply, and divide using2's complement representation of numbers.

5.Design finite state machines.

6.Program FPGA's using VHDL.

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: Mathematics	This department ☒ supports ☐ does not support the change.
Comments: Remove COMS 2903 and replace with MATH 2703 in the Computer Engineering Curriculum. CIS will no longer offer COMS 2903.	

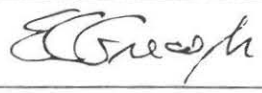
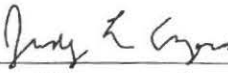
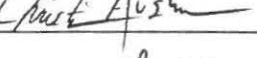
Department Head Signature: Jamie L. Myers

Date: 6/28/21

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Electrical Engineering	6/29/2021

Title	Signature	Date
Interim Department Head Carl Greco		6/29/2021
Dean Judy Cezeaux		6/29/2021
Assessment Christine Austin		7.7.2021
Registrar		9/7/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title: Electrical Engineering

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)
Replace COMS 2903: Discrete Structures for Technical Majors OR MATH 2703: Discrete Mathematics. with MATH 2703 only. The Computer Information Sciences Department will no longer offer COMS 2903 and has replaced it with MATH 2703 in their curricula and change COMS 2104 to COMS 1013 and 1011.

What impact will the change have on staffing, on other programs and space allocation?
This will increase class sizes or potentially require an additional section of MATH 2703.

Answer the following Assessment questions:

a. How does the program change align with the university mission?
   The change will continue to provide the knowledge of discrete math as required by the accrediting agency, ABET, for the computer engineering degree to facilitate "student success" and "intellectual development" which will allow the students to achieve their goals.
b. If this change in the program is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable.
   ABET requires discrete mathematics for the computer engineering degree. [https://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-engineering-programs-2020-2021/]
c. What is the rationale for this program change?
   1. How will the program change impact learning for students enrolled in this program?
      The replacement of COMS 2903 with MATH 2703 will continue to provide the knowledge and understanding required to be successful as a computer engineer.
   2. Provide an example or examples of student learning assessment evidence which supports the changes in the program.
      ABET, the program accrediting agency, requires discrete math for a computer engineering program. This change replaces one course with another that covered the same topics and will not require a change to the assessment processes.
b. 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.
   MATH 2703 meets the requirement for computer engineering degree program as mandated by ABET.
c. 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.)

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.

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

Curriculum Matrix for Catalog Curriculum in Bachelor of Science in Electrical Engineering (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: COMS 1013 COMS 1011 Delete: COMS 2104 Total Hours: 15
Sophomore Fall Semester Add/Change: Delete: Total Hours:	Sophomore Spring Semester Add/Change: Delete: Total Hours:
Junior Fall Semester Add/Change: Delete: Total Hours:	Junior Spring Semester Add/Change: Delete: COMS2903 Total Hours:
Senior Fall Semester Add/Change: Delete: Total Hours:	Senior Spring Semester Add/Change: Delete: Total Hours:
Total Program Hours 120	

Assessment Plan

1. Program Mission

The mission of the Department of Electrical Engineering at Arkansas Tech University is to develop and educate students to become electrical or computer engineers exhibiting professional competency and ethics, with a desire for life-long learning.

In order to fulfill its mission, the department has established the following educational objectives.

Graduates of the Arkansas Tech University Computer and Electrical Engineering degree programs, within a few years of graduating, will have

- Obtained employment in an engineering or closely-related field, or entered a graduate program in engineering or a related field or gained admission to a professional program such as medicine, law or business.
- Solved problems aided by the engineering proficiencies they learned in their undergraduate program.
- Recognized a pathway to make positive contributions to society using their engineering talents and skills by practicing their profession in an ethical and responsible manner.
- Engaged in continuing education and pursuit of membership in professional societies as well as FE/PE certification, or other certifications relevant to their chosen occupational field.
- Demonstrated accountability and worked effectively in a team environment with strong emphasis on multidisciplinary membership, inclusion, and communication.

2. Student Learning Outcomes – ABET

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

3. SLOs targeted with current Program Change

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

4. Measure of Effectiveness

For SLO 1.) students are expected to solve and identify a complex engineering program. ABET defines a complex engineering problem as: "Complex engineering problems include one or more of the following characteristics: involving wide-ranging or conflicting technical issues, having no obvious solution, addressing problems not encompassed by current standards and codes, involving diverse groups of stakeholders, including many component parts or sub-problems, involving multiple disciplines, or having significant consequences in a range of contexts." These engineering problems are also expected to contain "College-Level Mathematics" which is defined as "mathematics that requires a degree of mathematical sophistication at least equivalent to that of introductory calculus. For illustrative purposes, some examples of college-level mathematics include calculus, differential equations, probability, statistics, linear algebra, and ***discrete mathematics***." Therefore, it will be essential to collect data in courses where discrete mathematics is used including ELEG 2130 and ELEG 2134.

5. Listing of courses that will have assessment impacted due to program change

ELEG 2134 Digital Logic Design (SLO 1)

ELEG 2130 Digital Logic Design Lab (SLO 1)

Each of the above courses is identified to have course objectives that are linked to one or more student learning outcomes where college-level mathematics is used. It is expected that examples of students practicing mathematics will need to be collected from these courses.

6. Performance standards or criteria for success which demonstrate student learning for each outcome

The successful student should be able to:
1. ***Take a Boolean expression and minimize it using basic theorems and graphical/tabular techniques.***

2. ***Convert numbers from one base to another.***

3. Design minimal and/or hazard free combinational and sequential circuits at the gate level.

4.Design circuits that can add, subtract, multiply, and divide using2's complement representation of numbers.

5.Design finite state machines.

6.Program FPGA's using VHDL.

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: Mathematics	This department ☒ supports ☐ does not support the change.
Comments: Remove COMS 2903 and replace with MATH 2703 in the Computer Engineering Curriculum. CIS will no longer offer COMS 2903.	

Department Head Signature: Jamie L. Myers

Date: 6/28/21

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Electrical Engineering	6/29/2021

Title	Signature	Date
Interim Department Head Carl Greco		6/29/2021
Dean Judy Cezeaux		6/29/2021
Assessment Christine Austin		7.7.2021
Registrar		9/7/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title: Computer Engineering

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)
Replace COMS 2903: Discrete Structures for Technical Majors with MATH 2703: Discrete Mathematics. The Computer Information Sciences Department will no longer offer COMS 2903 and has replaced it with MATH 2703 in their curricula.
Change COMS 2104 to COMS 1013 and 1011

What impact will the change have on staffing, on other programs and space allocation?
This will increase class sizes or potentially require an additional section of MATH 2703.

Answer the following Assessment questions:

a. How does the program change align with the university mission?
   The change will continue to provide the knowledge of discrete math as required by the accrediting agency, ABET, for the computer engineering degree to facilitate "student success" and "intellectual development" which will allow the students to achieve their goals.
b. If this change in the program is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable.
   ABET requires discrete mathematics for the computer engineering degree. [https://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-engineering-programs-2020-2021/]
c. What is the rationale for this program change?
   1. How will the program change impact learning for students enrolled in this program?
      The replacement of COMS 2903 with MATH 2703 will continue to provide the knowledge and understanding required to be successful as a computer engineer.
   2. Provide an example or examples of student learning assessment evidence which supports the changes in the program.
      ABET, the program accrediting agency, requires discrete math for a computer engineering program. This change replaces one course with another that covered the same topics and will not require a change to the assessment processes.
b. 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.
   MATH 2703 meets the requirement for computer engineering degree program as mandated by ABET.
c. 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.)

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.

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

Curriculum Matrix for Catalog Curriculum in Computer Engineering (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: COMS 1013 COMS 1011 Delete: COMS 2104 Total Hours: 15 hours
Sophomore Fall Semester Add/Change: Delete: Total Hours:	Sophomore Spring Semester Add/Change: Delete: Total Hours:
Junior Fall Semester Add/Change: MATH 2703 Delete: COMS 2903 Total Hours: 15	Junior Spring Semester Add/Change: Delete: Total Hours:
Senior Fall Semester Add/Change: Delete: Total Hours:	Senior Spring Semester Add/Change: Delete: Total Hours:

Assessment Plan

1. Program Mission

The mission of the Department of Electrical Engineering at Arkansas Tech University is to develop and educate students to become electrical or computer engineers exhibiting professional competency and ethics, with a desire for life-long learning.

In order to fulfill its mission, the department has established the following educational objectives.

Graduates of the Arkansas Tech University Computer and Electrical Engineering degree programs, within a few years of graduating, will have

- Obtained employment in an engineering or closely-related field, or entered a graduate program in engineering or a related field or gained admission to a professional program such as medicine, law or business.
- Solved problems aided by the engineering proficiencies they learned in their undergraduate program.
- Recognized a pathway to make positive contributions to society using their engineering talents and skills by practicing their profession in an ethical and responsible manner.
- Engaged in continuing education and pursuit of membership in professional societies as well as FE/PE certification, or other certifications relevant to their chosen occupational field.
- Demonstrated accountability and worked effectively in a team environment with strong emphasis on multidisciplinary membership, inclusion, and communication.

2. Student Learning Outcomes – ABET

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

3. SLOs targeted with current Program Change

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

4. Measure of Effectiveness

For SLO 1.) students are expected to solve and identify a complex engineering program. ABET defines a complex engineering problem as: "Complex engineering problems include one or more of the following characteristics: involving wide-ranging or conflicting technical issues, having no obvious solution, addressing problems not encompassed by current standards and codes, involving diverse groups of stakeholders, including many component parts or sub-problems, involving multiple disciplines, or having significant consequences in a range of contexts." These engineering problems are also expected to contain "College-Level Mathematics" which is defined as "mathematics that requires a degree of mathematical sophistication at least equivalent to that of introductory calculus. For illustrative purposes, some examples of college-level mathematics include calculus, differential equations, probability, statistics, linear algebra, and ***discrete mathematics***." Therefore, it will be essential to collect data in courses where discrete mathematics is used including ELEG 2130 and ELEG 2134.

5. Listing of courses that will have assessment impacted due to program change

ELEG 2134 Digital Logic Design (SLO 1)

ELEG 2130 Digital Logic Design Lab (SLO 1)

Each of the above courses is identified to have course objectives that are linked to one or more student learning outcomes where college-level mathematics is used. It is expected that examples of students practicing mathematics will need to be collected from these courses.

6. Performance standards or criteria for success which demonstrate student learning for each outcome

The successful student should be able to:
1. ***Take a Boolean expression and minimize it using basic theorems and graphical/tabular techniques.***

2. ***Convert numbers from one base to another.***

3. Design minimal and/or hazard free combinational and sequential circuits at the gate level.

4.Design circuits that can add, subtract, multiply, and divide using2's complement representation of numbers.

5.Design finite state machines.

6.Program FPGA's using VHDL.

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: Mathematics	This department ☒ supports ☐ does not support the change.
Comments: Remove COMS 2903 and replace with MATH 2703 in the Computer Engineering Curriculum. CIS will no longer offer COMS 2903.	

Department Head Signature: Jamie L. Myers

Date: 6/28/21

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Electrical Engineering	07/01/2020

Title	Signature	Date
Department Head Carl Greco		07/01/2020
Dean Judy Cezeaux		06/29/2021
Assessment Christine Austin		7.7.2021
Registrar		11/5/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Accelerated BS/MS for Electrical Engineering

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)
The Department of Electrical Engineering plans to adopt the new Accelerated Bachelor's Plus Master's Degree Program. Under this new university policy, qualified undergraduate students can register for graduate level credit hours as undergraduates and receive dual credit toward both undergraduate and graduate degrees within Electrical Engineering.

In accordance with the university policy, the Electrical Engineering program will allow qualified undergraduates to claim up to 12 graduate level credits while they are still enrolled in their undergraduate program. The target undergraduate courses for which double counting will be allowed are ELEG 4313 Modern Control Systems, ELEG 4113 Digital Signal Processing, ELEG 4153 Communication Systems II, ELEG 4133 Advanced Digital Design, and ELEG 4993 Special Problems in Engineering. These first four courses, representing 12 hours, are also all already cross listed as ELEG 5313 (Modern Control Systems), ELEG 5113 (Digital Signal Processing), ELEG 5153 (Communication Systems II), and ELEG 5133 (Advanced Digital Design). The ELEG 5993 Special Problems in Engineering could be taken in place of ELEG 4993.

A qualified electrical engineering undergraduate will be a student who has completed 90 credit hours at the undergraduate level with a cumulative 3.00 GPA or higher in alignment with the policy adopted by the Arkansas Tech Board of Trustees (see attachment to this document) approved on 12/08/2020 and released by email from the Graduate Dean Dr. Schoephoerster.

What impact will the change have on staffing, on other programs and space allocation?

There will be no changes to staffing or space allocation because of this program change. We already offer ELEG 4313, ELEG 4113, ELEG 4153, ELEG 4133, and ELEG 499x (x in the range [1 to 4]) as undergraduate courses that are either electives or required in the current curriculums. This program will allow those qualified students to obtain graduate credit while still finishing their undergraduate degree, however, this will require no additional staff or space by the Electrical Engineering department or the College of Engineering and Applied Science.

Answer the following Assessment questions:

a. How does the program change align with the university mission?

This program change will retain academic talent within the Electrical Engineering program and contribute to empowering students to be productive members of the community while expanding upon the university's technological traditions.

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

Not applicable.

c. What is the rationale for this program change?

1. How will the program change impact learning for students enrolled in this program?

This program change will allow students to pursue graduate level credit while they are still enrolled in their undergraduate courses. This will assist undergraduate students in completing their graduate degree at ATU in less time.

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

The Master of Engineering at ATU is currently not accredited by an outside agency. The undergraduate program in Electrical Engineering is accredited by ABET. ABET does provide guidelines for Master's

Level programs. Those guidelines are available at: https://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-engineering-programs-2020-2021/

A document is attached that details the assessment planning, along with key goals, that the Master of Engineering in Electrical Engineering plants to pursue to develop student learning assessment evidence that supports these changes.

Some definite evidence that will be collected will be to monitor and record the number of ATU undergraduates that pursue a Master's degree, especially those that have taken advantage of the accelerated option. In referring to the attachment, this will help the Master's programs on its long-term goals 1. and 3. Increasing the number of degrees produced and increasing enrollment.

b. 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 2 other institutions in the state of Arkansas that offer advanced degrees in engineering disciplines. These institutions are the University of Arkansas and Arkansas State University. Only the University of Arkansas offers an advanced degree format in engineering.

The University of Arkansas as a "Retroactive Graduate Credit" program that newly admitted graduate students may elect to take part in. Under this program, fully admitted graduate students can claim up to 12 hours in their final 12-month undergraduate curriculum to be used as graduate credit. The courses cannot have been used by the undergraduate degree program and they must be at the 5000 level or above. There is also an option that the students advisory committee, by petition to the Graduate School, can accept courses at the 4000 level above if those courses were taken in the last semester of the students' undergraduate degree. For more information: Retroactive Graduate Credit.

Arkansas State University offers a policy that is called an "Accelerated Master's degree option", where "outstanding" students can begin to take graduate courses as an undergraduate, in their junior or senior year. ASU provides this option in Accounting, Agriculture, Chemistry, Computer Science, Disaster Preparedness and Emergency Management, Political Science, Special Education-Instructional Specialist Grades P-4, and Special Education-Instructional Specialist Grades 4-12, but it appears that they do not list an accelerated option for any engineering degrees. For the available programs, they do allow students to apply up to 12 graduate credit hours toward completion of the undergraduate degree. The dual counting only counts after the student has completed their undergraduate degree program. In addition, only courses where the student earned a "B" or better are counted. For more information: Undergrad Admission into the Accelerated Master's Program Arkansas State University

c. 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.)

Please see attached document outlining the assessment planning for the Master of Engineering in Electrical Engineering. Before assessment of student learning outcomes can be obtained, it will be necessary to have required ELEG courses that all graduate students take. With the current curriculum, students can choose any of up to 18 hours of ELEG courses at the 6000 level and up to 6 hours at the

5000 level, but the current program does not require any specific courses. Therefore, it is difficult to take meaningful assessment data. It is a near-term goal of the Master's program to restructure itself to perform assessment based on student learning outcomes. For those undergraduate courses that will be double counted, the undergraduate program already has an assessment process in place for measuring and collecting data. Data can be collected on those select courses that are to be included in the Accelerated BS/ME plan. See the attached document for further details.
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.

Mission Statement:

The Master of Engineering in Electrical Engineering at Arkansas Tech University seeks to further the education of the students of Arkansas and beyond. We seek to provide a comprehensive addition to a student's undergraduate education. We do so by focusing on the collaboration between faculty and student to provide excellence in mentorship.

Goals:

The near-term goals of the Master of Engineering in Electrical Engineering at ATU are:

1. Reduce total required semester hours to 30 from 36.
2. Implement an Accelerated Bachelors/Masters program to aid students in completing their graduate studies in a timelier manner.
3. Implement an option to allow for thesis-based research and or advance projects as part of the students' curriculum including either thesis hours or project hours that students can register for.
4. Determine an applicable project and/or research-based focus of the curriculum.

The longer-term goals for the Master of Engineering in Electrical Engineering at ATU are:

1. Obtain an average graduation numbers of 5 degrees per year.
2. Increase facilities to encourage faculty projects and research

Program Educational Objectives

- Obtained employment in an engineering or closely-related field, or entered a terminal degree program (Ph.D. or other professional terminal degree) in engineering or a related field.
- Solved problems aided by practicing advanced engineering skills they learned in their graduate program.
- Recognized a pathway to make positive contributions to society using their engineering talents and skills by practicing their profession in an ethical and responsible manner.
- Engaged in continuing education and pursuit of membership in professional societies as well as FE/PE certification, or other certifications relevant to their chosen occupational field.
- Demonstrated accountability and worked effectively in a team environment with strong emphasis on multidisciplinary membership, inclusion, and communication

Student Outcomes

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Performance Indicators

We need to change the curriculum to allow for at least two required EE courses that must be taken. In addition, we should reduce the credit hour load to 30 hours. The justification for reducing to 30 hours is that ABET specifically states that at least 30 hours are required for an accredited Master's program. Though the Master's program is not accredited, we want to be prepared to accredit it in the future, but also the ABET criteria provides a good framework for a functional program with assessment

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

Curriculum Matrix for Catalog Curriculum in BSEE Electrical Engineering (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: Delete: Total Hours:
Sophomore Fall Semester Add/Change: Delete: Total Hours:	Sophomore Spring Semester Add/Change: Delete: Total Hours:
Junior Fall Semester Add/Change: Technical Elective[3] and Electrical Engineering Elective[4] Delete: Total Hours:	Junior Spring Semester Add/Change: Technical Elective[3] and Electrical Engineering Elective[4] Delete: Total Hours:
Senior Fall Semester Add/Change: ELEG 4113 (ELEG 5113)[4] Delete: Total Hours:	Senior Spring Semester Add/Change: Technical Elective[3] and Electrical Engineering Elective[4] Delete: Total Hours:

3 & 4 – 5000 level courses for Accelerated BS/ME for Electrical Engineering

Curriculum Matrix for Catalog Curriculum in BSEE Electrical Engineering Biomedical Option (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: Delete: Total Hours:
Sophomore Fall Semester Add/Change: Delete: Total Hours:	Sophomore Spring Semester Add/Change: Delete: Total Hours:
Junior Fall Semester Add/Change: Delete: Total Hours:	Junior Spring Semester Add/Change: Delete: Total Hours:
Senior Fall Semester Add/Change: ELEG 4113 (ELEG 5113)[4] Delete: Total Hours:	Senior Spring Semester Add/Change: Delete: Total Hours:

3 & 4 – 5000 level courses for Accelerated BS/ME for Electrical Engineering

Curriculum Matrix for Catalog Curriculum in BSCMPE – Computer Engineering (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: Delete: Total Hours:
Sophomore Fall Semester Add/Change: Delete: Total Hours:	Sophomore Spring Semester Add/Change: Delete: Total Hours:
Junior Fall Semester Add/Change: Delete: Total Hours:	Junior Spring Semester Add/Change: Delete: Total Hours:
Senior Fall Semester Add/Change:ELEG 4133 (ELEG 5133)[4] , ELEG 4113 (ELEG 5113)[4] Delete: Total Hours:	Senior Spring Semester Add/Change: Electrical Engineering Electives Delete: Total Hours:

3 & 4 – 5000 level courses for Accelerated BS/ME for Electrical Engineering

ARKANSAS TECH UNIVERSITY

REQUEST FOR COURSE CHANGE

Department Initiating Proposal	Date
Behavioral Sciences	9-8-2021

Title	Signature	Date
Department Head	David Ward	9/10/21
Dean	Jeffrey Cass	9/14/2021
Assessment Dr. Christine Austin	Christine Austin	9.13.21
Registrar	[illegible]	11/1/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Course Subject: (e.g., ACCT, ENGL)	Course Number: (e.g., 1003)
EAM	**1013**

Official Catalog Title:

Aim and Scope of Emergency Management

Is this course cross-listed with another existing course? If so, list course subject and number.

○ Yes ◉ No

Request to change: (check appropriate box):

☐ Course Number ☐ Title ☑ Course Description

☐ Cross-Listing ☐ Prerequisite ☐ Co-requisite

☐ Grading ☐ Fee

☐ Other

NOTES: These changes will become effective in the Summer I Term of the new catalog year. If this course is cross-listed, a prerequisite/co-requisite, or included in the course description of other courses, a Course Change must be submitted to address all changes in related courses.

New Course Number: (e.g., 1003)

New Official Catalog Title: (If official title exceeds 30 characters, indicate Banner Title below)

Banner Title: (limited to 30 characters, including spaces, capitalize all letters - this will display on the transcript)

New Course Description:
Provides a broad overview of Emergency Management in the context of Mitigation, Preparedness, Response, and Recovery, with exploration of the causes, characteristics, nature and effects of natural and technological hazards. Required for major.

New Cross List:

☐ Adding Cross-Listing ☐ Changing Cross-Listing ☐ Deleting Cross-Listing

If adding or changing cross-listing, indicate course subject and number

New Prerequisite (list all, as you want them to appear in the catalog):

New Co-requisite (list all, as you want them to appear in the catalog):

☐ Elective ☑ Major ☐ Minor

(If major or minor course, you must complete the Request for Program Change form to add course to program.)

Answer the following Assessment questions:

a. If this course is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable.
Not applicable.

b. If this course is required for the major or minor, complete the following.
   a. Provide the program level learning outcome(s) it addresses.

   Program learning outcomes have not changed, assessment plan is attached.

   b. Provide tool or measure directly linked to each program learning outcome. (How will student learning in this outcome be measured?)

Program learning outcomes have not changed, assessment plan is attached.

c. What is the rationale for adding this course? What evidence supports this action?
This course has been a degree requirement since the inception of the EAM degree. The new course description encapsulates the new learning objectives for EAM 1013 due to the deletion of EAM 1003 from the EAM program.

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.

EAM Program Learning Objectives for 1013, & 2XX3

Undergraduate Success Measure: At least 75% of students will get at least 70% in all the assessment measures.

Program Learning Outcome: Operates within the EM framework

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Demonstrate broad knowledge of key goals, documents, and elements of Comprehensive Emergency Management (CEM).	Final Exam, #4	

Program Learning Outcome: Disaster Risk Management

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 2XX3 – Skills	Introduce	Applies awareness of the elements of risk to risk analysis and evaluation.	Grafton Flood Exercise	

Program Learning Outcome: Scientific Literacy

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Identify examples of scales and systems used to measure the magnitude of hazards and disasters.	Final Exam	

Program Learning Outcome: Geographic Literacy

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Explain the relationship between a geographic location and the existing hazards of that location.	Natural Hazards Assignment	

Program Learning Outcome: Sociocultural Literacy

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 2XXX3- Skills	Introduce	Demonstrate understanding of fundamental principles of cultural competence and its importance to emergency management.	Cultural Competence Assignment	

Program Learning Outcome: Technological Literacy

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Discuss the use of emergency management related technologies.	Ushahidi Assignment	

Program Learning Outcome: Critical Thinking

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 2XX3- Skills	Introduce	Understand critical thinking and professional decision-making skills in an emergency management context.	Critical Thinking Assignment	

Program Learning Outcome: Professional Ethics

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Define the professional ethical foundation of the emergency management profession and practice.	Advice Assignment	

Program Learning Outcome: Systems Literacy

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 2XX3 - Skills	Introduce	Work in partnership with others, and utilize a range of resources available within the system to establish an innovative solution to a pressing problem.	Team Project	

Program Learning Outcome: Leadership

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 2XX3 - Skills	Introduce	Understand the importance of leadership skills in an emergency management context	Situational Leadership grid	

Program Learning Outcome: Continual Learning

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 2XX3 - Skills	Introduce	Identify the key certifications and licenses a professional emergency manager should seek and attain for success as a professional emergency manager.	Assignment	

Program Learning Outcome: Community Engagement

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Recognize the issues and needs of the local community and populations served.	Service Based Learning	

Program Learning Outcome: Governance & Civics

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Explain governance issues and how emergency management coordinates with local, state, and federal government, private sector, and non-governmental organizations	Final Exam, #10	

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Behavioral Sciences	7-1-2021

Title	Signature	Date
Department Head	David Ward	9/10/21
Dean	Jeffrey Cass	9/14/2021
Assessment Dr. Christine Austin		9.13.21
Registrar		11/1/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Emergency Administration and Management

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

Curriculum Matrix for Catalog Curriculum in Emergency Administration and Management	
Freshman Fall Semester Add/Change: EAM 1013 Aim & Scope of Emergency Management Delete: EAM 1003 Living in a Hazardous Environment Total Hours: 16	Freshman Spring Semester Add/Change: Elective 3 hrs. Delete: EAM 1013 Aim & Scope of Emergency Management Total Hours: 16
Sophomore Fall Semester Add/Change: Elective 6 hrs. Delete: EAM 3003 Developing Emergency Management Skills EAM 3013 Public Policy and Politics in Emergency Management Total Hours: 16	Sophomore Spring Semester Add/Change: EAM elective 3 hrs. Elective 3 hrs. EAM Elective 3 hrs. Delete: EAM 3023 Principles of Preparedness and Response Operations EAM 3053 Introduction to Ethical and Legal Issues in Emergency Management EAM 3063 Emergency Management Doctrine Total Hours: 15
Junior Fall Semester Add/Change: EAM 3003 Developing Emergency Management Skills EAM 3013 Public Policy and Politics in Emergency Management EAM 3063 Emergency Management Doctrine Delete: EAM 4003 Principles of Disaster Relief and Recovery EAM 4013 Mitigation and Continuity of Operations	Junior Spring Semester Add/Change: EAM 3023 Principles of Preparedness and Response Operations EAM 3053 Introduction to Ethical and Legal Issues in Emergency Management EAM 4013 Mitigation and Continuity of Operations Delete: EAM Elective 6 hrs. Elective 3 hrs.

EAM 4023 Geographic Information Systems in Emergency Management Total Hours: 15	Total Hours: 15
Senior Fall Semester Add/Change: EAM 4003 Principles of Disaster Relief and Recovery EAM 4023 Geographic Information Systems in Emergency Management Delete: Elective 6 hrs. Total Hours: 15	Senior Spring Semester Add/Change: Delete: Total Hours: 12

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)

This change will (1) remove EAM 1003 Living in a Hazardous Environment from degree requirements, reducing the required core EAM hours from 60 to 57; (2) add 3 hours of electives; and (3) change the EAM curriculum matrix, including redistributing general elective courses and moving upper division EAM courses to the junior and senior years.

New wording for course catalog:

~~EAM 1013 Aim and Scope of Emergency Management: Provides a broad overview of Emergency Management in the context of Mitigation, Preparedness, Response, and Recovery, with exploration of the causes, characteristics, nature and effects of natural and technological hazards. Required for major.~~

What impact will the change have on staffing, on other programs and space allocation?
None

Answer the following Assessment questions:

a. How does the program change align with the university mission?

The proposed changes to the program will reduce the core requirements for graduation, allowing increased student access and flexibility in their pursuit of a degree.

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

Not applicable

c. What is the rationale for this program change?

In consideration of the state of the discipline, reducing the core credits in the degree program will not have a negative impact on the quality and reputation of the program, nor will it affect CAEMHSE accreditation. The content of EAM 1003 is greatly expanded from lower-level offerings in similar programs at other universities and is more suited for an upper-level course. However, the course learning objectives and necessary content can easily be incorporated into the curriculum of 1013 and 3003. Not only does this make the program more accessible by reducing the required courses for graduation, it allows for the offering of an upper-level elective course on natural hazards and climate change which will provide greater depth of knowledge on the subject.

1. How will the program change impact learning for students enrolled in this program?

Through these changes, all PLOs will be introduced in EAM 1013 and 3003, providing a solid foundation for continuing with upper-level core and elective courses. This change does not add or remove any content from the CLOs and PLOs, so students will achieve the same learning outcomes. However, the reduction of core required hours enables students to pursue additional elective courses, whether in the EAM program, or in pursuit of a second degree.

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

There is no student learning assessment data that drives this proposed program change. However, our transfer EMT/paramedic students have EAM 1003 waived for the degree and it has not impacted these students' performance in upper-level EAM courses.

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.

As previously mentioned, few Emergency Management programs in the USA focus three hours at the lower-level on hazards. This is true of ASU-Jonesboro, our only in-state competitor. The current state of the discipline has moved away from a hazards focus to a vulnerability focus, something that is reflected in our revised curricula for EAM 3003 and 1013. By confirming these two courses to be our foundational platform, we are more aligned with current best practice in the discipline.

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.)

Program learning outcomes have not changed; however, the assessment plan for EAM 1013 and 3003 is attached.

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.

EAM Program Learning Objectives for 1013, & 3003

Undergraduate Success Measure: At least 75% of students will get at least 70% in all the assessment measures.

Program Learning Outcome: Operates within the EM framework

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Demonstrate broad knowledge of key goals, documents, and elements of Comprehensive Emergency Management (CEM).	Final Exam, #4	

Program Learning Outcome: Disaster Risk Management

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 3003 – Skills	Introduce	Applies awareness of the elements of risk to risk analysis and evaluation.	Grafton Flood Exercise	

Program Learning Outcome: Scientific Literacy

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Identify examples of scales and systems used to measure the magnitude of hazards and disasters.	Final Exam	

Program Learning Outcome: Geographic Literacy

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Explain the relationship between a geographic location and the existing hazards of that location.	Natural Hazards Assignment	

Program Learning Outcome: Sociocultural Literacy

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 3003- Skills	Introduce	Demonstrate understanding of fundamental principles of cultural competence and its importance to emergency management.	Cultural Competence Assignment	

Program Learning Outcome: Technological Literacy

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Discuss the use of emergency management related technologies.	Ushahidi Assignment	

Program Learning Outcome: Critical Thinking

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 3003- Skills	Introduce	Understand critical thinking and professional decision-making skills in an emergency management context.	Critical Thinking Assignment	

Program Learning Outcome: Professional Ethics

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Define the professional ethical foundation of the emergency management profession and practice.	Advice Assignment	

Program Learning Outcome: Systems Literacy

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 3003 - Skills	Introduce	Work in partnership with others, and utilize a range of resources available within the system to establish an innovative solution to a pressing problem.	Team Project	

Program Learning Outcome: Leadership

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 3003 - Skills	Introduce	Understand the importance of leadership skills in an emergency management context	Situational Leadership grid	

Program Learning Outcome: Continual Learning

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 3003 - Skills	Introduce	Identify the key certifications and licenses a professional emergency manager should seek and attain for success as a professional emergency manager.	Assignment	

Program Learning Outcome: Community Engagement

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Recognize the issues and needs of the local community and populations served.	Service Based Learning	

Program Learning Outcome: Governance & Civics

Course	Level – I, R, M	Objective	Assessment Measure	Results
EAM 1013 – Aim & Scope	Introduce	Explain governance issues and how emergency management coordinates with local, state, and federal government, private sector, and non-governmental organizations	Final Exam, #10	

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Department of Behavioral Sciences	7-1-21

Title	Signature	Date
Department Head	David Ward	7/1/21
Dean	Jeffrey Cass	7/2/21
Assessment Dr. Christine Austin	Christi Austin	9.1.21
Registrar	[illegible]	11/1/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Accelerated Bachelor's Plus EMHS Master's Degree

Outline change in program: Accelerated Bachelor's + EMHS Master's Degree Program

1. This program partners with a BS degree in Emergency Administration and Management.
2. A maximum of twelve graduate level credit hours can be double counted towards the Bachelor's Plus EMHS Master's Degree.
3. Four EMHS courses (EMHS 6063, EMHS 6103, EMHS 5003, and an EMHS 3 hr elective) can be used to replace 12 hours of upper-division undergraduate electives to fulfill the requirements for a BS degree in EAM. (Courses noted below.)
4. Students will take no more than 6 hours of graduate courses per semester.
5. Students may apply in their Junior year for admission into the Accelerated Bachelor's Plus EMHS Master's Degree Program; however, the student must complete a minimum of 90 credit hours towards the Bachelor's degree and have earned a minimum grade point average of 3.25 or better in those undergraduate courses to be eligible for admission into the Accelerated Bachelor's Plus EMHS Master's Degree Program. Once approved the student will be conditionally admitted into the EMHS graduate program.
6. A course used toward an undergraduate degree cannot be counted or used later for graduate credit, except in the case of enrollment in an approved accelerated master's program. Graduate tuition will be charged for all graduate courses.
7. Only courses with grades B or better will be eligible to count toward graduate credit.
8. The curriculum will follow the existing curriculum in the undergraduate and graduate degree programs comprising the Accelerated Bachelor's Plus EMHS Master's Degree Program.
9. All other general requirements for the Bachelor's and Master's degree programs that comprise the Accelerated Bachelor's Plus EMHS Master's Degree Program apply and must be satisfied.
10. Upon completion of the Bachelor's degree requirements, students will be accepted into the Graduate College at a status consistent with the Graduate College and individual program guidelines. Students must meet all the graduate requirements for dual credit courses to receive graduate credit for these courses to contribute toward their Master's degree.
11. Students in the Accelerated Bachelor's Plus EMHS Master's Degree Program will apply for graduation with the Bachelor's degree on the schedule delineated in the undergraduate catalog and will receive their bachelor's degree upon completion of all the requirements for the undergraduate degree. The Master's degree will be awarded when the student has completed the remaining requirements for the EMHS degree.

Graduate Core courses – 6 hours total.
EMHS 6063: Principles of Emergency Management
EMHS 6103: Research Design & Methods

Electives – 6 hours total.
EMHS 5003: Disaster Relief & Recovery (as an elective instead of EAM 4003;
students may not get credit for EMHS 5003 after taking EAM 4003)

One graduate elective as listed below (3 hours):
EMHS 5043: Ethics
EMHS 5053: HazMat
EMHS 5093: Grants
EMHS 5103: Critical Infrastructure
EMHS 5993: Disasters & Public Health
EMHS 5993: Planning
EMHS 5993: Disaster Fieldwork Research
EMHS 6003: Design & Management of Preparedness & Mitigation Systems

EMHS 6023: Risk & Vulnerability Assessment
EMHS 6043: Contemporary Issues
EMHS 6053: Legal
EMHS 6070: Terrorism
EMHS 6143: Social Vulnerability
EMHS 6193: International Emergency Management
EMHS 6203: Crisis Communication
EMHS 6233: Epidemics & Pandemics
EMHS 6243: Intelligence
EMHS 6253: Info Sec
EMHS 6543: GIS in EMHS

New wording for Course Catalog:
Students seeking admission into the Accelerated Bachelor's Plus EMHS Master's Degree Program must have completed a minimum of 90 credit hours towards their Bachelor's degree and have earned a minimum grade point average of 3.25 or better in those undergraduate courses to be eligible for admission into the Accelerated Bachelor's Plus EMHS Master's Degree Program.

What impact will the change have on staffing, on other programs and space allocation?
NONE

Answer the following Assessment questions:

a. How does the program change align with the university mission?

The university's mission includes "student success, access, and excellence" which this program change directly addresses by encouraging high-achieving undergraduate students to continue their pursuit of academic excellence with taking accessible emergency management and homeland security graduate courses that will encourage their success. Also, providing a more economical (& accessible) path for an EMHS Master's degree serves for the benefit of "Arkansas, the nation, and the world."

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

NOT APPLICABLE.

c. What is the rationale for this program change?

It is the University's policy that allows qualified undergraduate students to register for graduate level credit hours as undergraduates and receive dual credit toward both undergraduate and graduate degrees within the designated programs that comprise the Accelerated Bachelor's Plus EMHS Master's Degree Program.

1. How will the program change impact learning for students enrolled in this program?

For students pursuing the Accelerated Bachelor's Plus EMHS Master's Degree Program, this program change will impact their learning by encouraging deeper engagement in the required EAM 4003 course by having accelerated students take EMHS 5003 instead. As well, allowing accelerated students to take EMHS courses (6063, 6103, & one EMHS elective) instead of EAM or general electives will enhance accelerated undergraduate students' knowledge. As a benefit, this program change will accelerate the graduation date for the EMHS degree for accelerated students.

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

This is a new program. We do not have any learning assessment evidence for this change. However, the Department of Emergency Management had an exceptional undergraduate student, Clayton Frazier, who took EMHS 6043 while he was still an undergraduate student. He completed both his EAM and EMHS degrees with a 4.0. This anecdotal evidence indicates that student learning assessment would support this change.

b. 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.

Several universities in the United States offer accelerated BS + MS degree programs. Some examples of these universities are: University of Arkansas, Little Rock (Department of Information Science), Arkansas State University, Jonesboro (Accounting, Agriculture, Chemistry, Computer Science, Disaster Preparedness & EM, History, Political Science, and Special Education), University of Central Florida, Orlando (College of Engineering & Computer Science), Stony Brook University, Stony Brook, NY (Department of Technology and Society), University of Houston, Houston (Department of Computer Science), and Texas Tech University, Lubbock (College of Engineering). This program change will allow ATU's EMHS program to be competitive with ASU-J.

c. 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.)

EMHS Assessment plan for required graduate core courses (EMHS 6063 & 6103) is attached.

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.

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

**Additionally, we request the following changes to the Undergraduate Catalog:

1. To the existing 2 footnotes, add number 3 with the following wording: "Students admitted to the Accelerated Bachelor's Plus EMHS Master's Degree Program can take up to 9 credit hours at the 5000-level and 6000-level that can count towards elective hours."

2. In the curriculum matrix add a footnote to EAM 4003 Principles of Disaster Relief and Recovery: "Students admitted to the Accelerated Bachelor's Plus EMHS Master's Degree Program may take EMHS 5003 instead of EAM 4003."

Curriculum Matrix for Catalog Curriculum in BS-EAM to MS-EMHS (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: Delete: Total Hours:
Sophomore Fall Semester Add/Change: Delete: Total Hours:	Sophomore Spring Semester Add/Change: Delete: Total Hours:
Junior Fall Semester Add/Change: Add Accelerated program footnote[4] to Electives[4] - 6 hrs ~~Add 3 hrs of EAM electives~~ Delete: ~~EAM 4003~~ Total Hours: 15	Junior Spring Semester Add/Change: Delete: Total Hours:
Senior Fall Semester Add/Change: Add Accelerated program footnote[4] to Electives[4] - 3 hrs EAM 4003 Principles of Disaster Relief and Recovery	Senior Spring Semester Add/Change:

Delete: 3 hrs of EAM electives Total Hours: 15	Delete: Total Hours:

Course	Learning Objective	Competency	Assessment Measure	Result
EMHS 6063				
Principles of Emergency Management	Apply appropriate theories, concepts, policies, and emergency management measures to multiple emergency and disaster context.	Sociocultural Literacy (I) (R) Leadership (I) Operates in the EM Framework/Principles/Body of Knowledge (I)	Exam Reflection Assignment Written Assignment	
	Differentiate and interpret emergency management policies, the types of hazards that threaten the United States, and the measures to mitigate, prepare, respond, and recover from such hazards.	Systems Literacy (I)	Written Assignment	
	Distinguish among the many organizations and communities involved in the multiple aspects of emergency management.	Introduce Community Engagement (I)	Case Study	
	Examine the future challenges and opportunities pertaining to the emergency management field	Introduce Disaster Risk Management (I)	Written Assignment	

Course	Learning Objective	Competency	Assessment Measure
EMHS 6103			
Research Methods and Design	Apply the systematic process of scientific research to a personal research project	Disaster/ Risk Management (R)	Research Question/Focus Statement 75% of students earn 80%
	Analyze and evaluate quality peer-reviewed research articles. Differentiate scientific research from other forms of publications	Scientific Literacy (I/R)	Article Overview 75% of students earn 80%
	Identify a research topic area and develop a feasible research question	Operates within the EM framework, principles, and body of knowledge (R)	Research Question/Focus Statement 75% of students earn 80%
	Analyze and evaluate quality peer-reviewed research articles. Differentiate scientific research from other forms of publications	Possess Critical Thinking. (I)	Article Overview Assignment 75% of students earn 80%
	Apply research ethics to research process and the use of human subjects	Abide by Professional Ethics (I)	CITI Training 90% of students complete successfully
	Demonstrate graduate collegiate writing skills and apply APA 6 formatting to all written work with appropriate in-text citations, empirical support, and no plagiarism	Continual Learning (I)	Final Paper 75% of students earn 80%

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Mechanical Engineering	07/01/2020

Title	Signature	Date
Department Head John Krohn	John L. Krohn	07/01/2020
Dean Judy Cezeaux	Judy L Cezeaux	7/1/2021
Assessment Christine Austin	Christi Austin	7.7.2021
Registrar	Tammy Weaver	9/1/2021
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Accelerated BS/MS for Mechanical Engineering

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)
The Department of Mechanical Engineering would like to adopt the new Accelerated Bachelor's Plus Master's Degree Program. Under this new university policy, qualified undergraduate students can register for graduate level credit hours as undergraduates and receive dual credit toward both undergraduate and graduate degrees within Mechanical Engineering.

In accordance with the university policy, the Mechanical Engineering program will allow qualified undergraduates to claim up to 12 graduate level credits while they are still enrolled in their undergraduate program. The target undergraduate courses for which double counting will be allowed are MCEG 4043 Physical Metallurgy, MCEG 4053 Corrosion Principles, MCEG 4323 Power Plant Systems, MCEG 4343 Internal Combustion Engines, MCEG 4413 Finite Element Analysis, MCEG 4463 Heating, Ventilating and Air Conditioning Design, MCEG 4473 Mechanical Vibrations, MCEG 4503 Nuclear Power Plants, and MCEG 4993 Special Problems in Engineering. All of these courses are elective courses for the BSME program and all are linked to 5000 level courses.

A qualified mechanical engineering undergraduate will be a student who has completed 90 credit hours at the undergraduate level with a cumulative 3.25 GPA or higher.

What impact will the change have on staffing, on other programs and space allocation?

There will be no changes to staffing or space allocation because of this program change.

Answer the following Assessment questions:

a. How does the program change align with the university mission?

This program change will retain academic talent within the Mechanical Engineering program and contribute to empowering students to be productive members of the community while expanding upon the university's technological traditions.

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

Not applicable.

c. What is the rationale for this program change?

1. How will the program change impact learning for students enrolled in this program?

This program change will allow students to pursue graduate level credit while they are still enrolled in their undergraduate courses. This will assist undergraduate students in completing their graduate degree at ATU in less time.

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

The Master of Engineering at ATU is currently not accredited by an outside agency. The undergraduate program in Mechanical Engineering is accredited by ABET. ABET does provide guidelines for Master's Level programs. Those guidelines are available at: https://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-engineering-programs-2020-2021/

A document is attached that details the assessment planning, along with key goals, that the Masters of Engineering in Mechanical Engineering plans to pursue in order to develop student learning assessment

evidence that supports these changes.

Some definite evidence that will be collected will be to monitor and record the number of ATU undergraduates that pursue a Master's degree, especially those that taken advantage of the accelerated option. In referring to the attachment, this will help the Master's programs on its long-term goals 1. and 3. Increasing the number of degrees produced and increasing enrollment.

b. 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.

University of Arkansas – Fayetteville – BS to MS in Computer Engineering
[https://computer-science-and-computer-engineering.uark.edu/academics/graduate/index.php]

University of Central Arkansas – BS to MS in Computer Science
[https://uca.edu/computerscience/bs-ms-computer-science-5-year-program/]

Arizona State University – BS to MS Engineering
[https://poly.engineering.asu.edu/accelerated-4-1-degree-programs/]

c. 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.)

Please see attached document outlining the assessment planning for the Master of Engineering in Mechanical Engineering. Before assessment on student learning outcomes can be obtained, it will be necessary to have required MCEG courses that all graduate students take. With the current curriculum, students can choose any of up to 18 hours of MCEG courses at the 6000 level and up to 6 hours at the 5000 level, but the current program does not require any specific courses. Therefore, it is difficult to take meaningful assessment data. It is a near-term goal of the Masters program to restructure itself to perform assessment based on student learning outcomes.

For those undergraduate courses that will be double counted, the undergraduate program already has an assessment process in place for measuring and collecting data. Data can be collected on those select courses that are to be included in the Accelerated BS/MS plan. See attached document for further details.

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.

For the Accelerated MECH proposal:

[6]BS Mechanical Engineering – Seniors ~~enrolled in~~ admitted to the Accelerated BSME to Masters of Engineering in Mechanical Engineering Program are able take up to 12 credit hours at the 5000-level that can count as 4000-level courses. The following courses may be used to fulfill the engineering and technical elective requirements in the BSME program: MCEG 5043, MCEG 5053, MCEG 5323, MCEG 5343, MCEG 5413, MCEG 5463, MCEG 5473, MCEG 5503, and MCEG 5993.

~~No changes necessary in the existing curricula.~~

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

Curriculum Matrix for Catalog Curriculum in BSME Mechanical Engineering (enter title for program changing)	
Freshman Fall Semester Add/Change: Delete: Total Hours:	Freshman Spring Semester Add/Change: Delete: Total Hours:
Sophomore Fall Semester Add/Change: Delete: Total Hours:	Sophomore Spring Semester Add/Change: Delete: Total Hours:
Junior Fall Semester Add/Change: ENGR Elective 3 Add Footnote 6 for Accelerated BS/MS for Mechanical Engineering Delete: Total Hours:	Junior Spring Semester Add/Change: ENGR Elective 3 Add Footnote 6 for Accelerated BS/MS for Mechanical Engineering Delete: Total Hours:
Senior Fall Semester Add/Change: Technical Elective 4 Add Footnote 6 for Accelerated BS/MS for Mechanical Engineering Delete: Total Hours:	Senior Spring Semester Add/Change: ENGR Elective 3 Add Footnote 6 for Accelerated BS/MS for Mechanical Engineering Delete: Total Hours:

Mission Statement:

The Master of Engineering in Mechanical Engineering at Arkansas Tech University seeks to further the education of the students of Arkansas and beyond. The program in Mechanical Engineering takes an interdisciplinary approach to maximize the students success through a mixture of cutting-edge research, diversified coursework, and world class faculty. We seek to provide a comprehensive addition to a student's undergraduate education.

Goals:

The near-term goals of the Master of Engineering in Mechanical Engineering at ATU are:

1. Reduce total required semester hours to 30 from 36.
2. Implement an Accelerated Bachelors/Masters program to aid students in completing their graduate studies in a timelier manner.
3. Implement an option to allow for thesis-based research and or advance projects as part of the students' curriculum including either thesis hours or project hours that students can register for.
4. Determine an applicable project and/or research-based focus of the curriculum.

The longer-term goals for the Master of Engineering in Mechanical Engineering at ATU are:

1. Obtain an average graduation number of 5 degrees per year.
2. Increase facilities to encourage faculty projects and research

Program Educational Objectives

- Obtained employment in an engineering or closely-related field, or entered a terminal degree program (Ph.D. or other professional terminal degree) in engineering or a related field.

- Solved problems aided by practicing advanced engineering skills they learned in their graduate program.

- Recognized a pathway to make positive contributions to society using their engineering talents and skills by practicing their profession in an ethical and responsible manner.

- Engaged in continuing education and pursuit of membership in professional societies as well as FE/PE certification, or other certifications relevant to their chosen occupational field.

- Demonstrated accountability and worked effectively in a team environment with strong emphasis on multidisciplinary membership, inclusion, and communication

Student Outcomes

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Performance Indicators

We need to change the curriculum to allow for at least two required ME courses that must be taken. In addition, we should reduce the credit hour load to 30 hours. The justification for reducing to 30 hours is that ABET specifically states that at least 30 hours are required for an accredited Master's program. Though the Master's program is not accredited, we want to be prepared to accredit it in the future, but also the ABET criteria provides a good framework for a functional program with assessment

ARKANSAS TECH UNIVERSITY

REQUEST FOR COURSE ADDITION

Department Initiating Proposal	Date
Physical Sciences	6-11-2021

Title	Signature	Date
Department Head		7-1-2021
Dean		2021 July 1
Assessment		7.9.2021
Registrar		9/8/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Course Subject: (e.g., ACCT, ENGL)	Course Number: (e.g., 1003)	Effective Term:
PHYS	~~4xx3~~ 4023	◉ Spring ○ Summer I

Official Catalog Title: (If official title exceeds 30 characters, indicate Banner Title below)

Computational Physics

Banner Title: (limited to 30 characters, including spaces, capitalize all letters — this will display on the transcript)

Will this course be cross-listed with another existing course? If so, list course subject and number.

○ Yes ◉ No

Will this course be cross-listed with a course currently not in the undergraduate or graduate catalog?

If so, list course subject and number. ○ Yes ◉ No

Is this course repeatable for additional earned hours? ○ Yes ◉ N How many total hours?

Grading: ◉ Standard Letter ○ P/F ○ Other

Mode of Instruction (check appropriate box):

◉ 01 Lecture	○ 02 Lecture/Laboratory	○ 03 Laboratory only	
○ 05 Practice Teaching	○ 06 Internship/Practicum	○ 07 Apprenticeship/Externship	
○ 08 Independent Study	○ 09 Readings	○ 10 Special Topics	
○ 12 Individual Lessons	○ 13 Applied Instruction	○ 16 Studio Course	
○ 17 Dissertation Research	○ 18 Activity Course	○ 19 Seminar	○ 98 Other

Does this course require a fee? ○ Yes ◉ No How Much? Select Fee Type

If selected other list fee type:

☐ Elective ☑ Major ☐ Minor

(If major or minor course, you must complete the Request for Program Change form to add course to program.)

If course is required by major/minor, how frequently will course be offered?

Every other year, In the fall of odd years.

Will this course require any special resources such as unusual maintenance costs, library resources, special software, distance learning equipment, etc.? No.

Will this course require a special classroom (computer lab, smart classroom, or laboratory)? No

Answer the following Assessment questions:

a. If this course is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable.
   Not applicable.
b. If this course is required for the major or minor, complete the following.
   In our tentative PLO plans,it is addressing our 'design' PLO for both engineering physics and physics options in the 'reinforce' level. Our PLO's are still work in progress and there will be more PLO's we will use this course to assess.
c. What is the rationale for adding this course? What evidence demonstrates this need?
   This course helps our students learn new challenges the graduates will face. Being able to write computer codes to solve problems numerically is becoming a more important skill and by creating this course, our students will learn the required skills to breakdown a real problem, write the algorithm to solve it numerically and then apply codes (such as Python) to solve it.

For the proposed course, attach a syllabus in Word format that includes: **(Items a. through d. should be entered as they should appear in the catalog)**

a. Course subject
b. Course number
c. Catalog course title
d. Catalog description
    1. Arkansas Course Transfer System (ACTS) course number, if applicable
    2. Cross-listing
    3. Offered (e.g., Fall only, Spring only. Do not enter if offer course fall and spring)
    4. Prerequisites
    5. Co-requisites
    6. Description
    7. Notes (e.g., information not in description such as course may be repeated for credit)
    8. Contact Hours if different than lecture (e.g., Lecture three hours, laboratory three hours)
    9. Fees (e.g., $36 art fee)
e. Section for Name of instructor, office hours, contact information (telephone, email)
f. Text required for course
g. Bibliography (supplemental reading list)
h. Justification/rationale for the course
i. Course objectives
j. Description of how course meets general education objectives (courses included in the general education component should show how the course meets one or more of the objectives contained in General Education Objectives listed in undergraduate catalog)
k. Assessment methods (include grading policy with specific equivalents for A, B, C)
l. Policy on absences, cheating, plagiarism, etc.
m. Course content (outline of material to be covered in course).

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.

4023

PHYS ~~4XX3~~: Computational Physics

Fall 2023

Instructor: Dr. Matthew Hankins
Date & Time: TBD
Class Location: TBD
Office Hours: TBD
Email: mhankins1@atu.edu
Phone: 479-968-0340

About this Course: Numerical methods provide an avenue to solving physics problems that do not have exact analytical solutions that can be derived from first principles. With the advent and proliferation of modern computers, the use of numerical techniques in physics has exploded and familiarity with computational tools is a must for many types of physics research (as well as a number of other data intensive fields of study). This course is meant to serve as an introduction to several common computational methods in physics and give students hands on experience with coding and software tools.

Catalog Description: This course provides an introduction to numerical methods that are commonly used to approach physical problems. Students in the course will gain both an understanding of the construction of several common algorithms as well as hands-on experience applying these tools to routine problems such as root finding, optimization, matrix manipulation, differential equations, and applications to calculus. The course includes collaborative projects meant to simulate 'real world' coding tasks and provides physics students with a practical background in scientific computing. As time allows, optional additional topics could include machine learning, databases, and advanced data visualization.

Prerequisite: PHYS 2124

Textbook: No Required Text

Course Objectives: This course is meant to provide students with a background in computational tools and numerical techniques that are useful for any student of physics (as well as other computationally intensive or data centric fields of study). Students in the course will learn the basics of the python programming language and gain familiarity with several commonly used software packages including numpy, scipy, pandas, and matplotlib. In addition to learning about useful pre-programmed functionality that can be found in the aforementioned packages, we will perform a more 'in depth' study of the algorithms behind several commonly used functions (including root finding, interpolation, extrapolation, and least squares optimization). Last, students will participate in a series of group projects during the semester in where they will gain firsthand experience with coding in collaborative environments which are used in many facets of the sciences as well as industry.

At the conclusion of the semester students should be able to:

1.) [Python Programming] write simple programs using the python programming language.

2.) [Common Algorithms] describe and implement the methods used for common tasks like numerical root finding, interpolating functions, and least squares optimization.

3.) [Computational Tools] describe and implement numerical solutions for differential equations using the Runge–Kutta technique.

4.) **[Creating Functions]** build a function 'from scratch' that is able to calculate a trig function (e.g., sin(x)) to a specified level of accuracy.

5.) **[Collaborative Coding]** interact with and contribute to online code repositories using git.

6.) **[Data Visualization]** produce effective, 'eye-catching' figures using sample data sets.

Grades: Your grade in this class will be based off the following items:

- **Homework:** Each week will have a homework assignment posted to the course github page. The assignments will largely consist of Jupyter notebooks with code snippets related to what was discussed in class. To complete the assignments simply 'fill in' the missing blanks in such a way that the code will run as intended without errors.
- **Quiz:** There will be periodic quizzes on topics throughout the semester. Quizzes will be available on blackboard and will largely follow from content in the homework assignments.
- **Individual Projects:** There will be ~3-4 planned individual coding projects that will be assigned over the course of the semester. In many ways these projects can be thought of as being similar to the homework assignments where you will be asked to complete a coding task however, you will be given more freedom in how you choose to accomplish said task. Grades will be assigned based on the functionality of the submitted code as it relates to the specified requirements.
- **Group Projects:** There will be ~3-4 planned group projects that will be carried out over the semester. Groups will consist of 2-3 members and grades will be assigned on the basis of individual efforts contributed (tracked via git submissions) and the functionality of the final code.

Letter grades will be assigned based off a total percentage between 0 and 100% as follows

A	≥89.5%
B	≥79.5%
C	≥69.5%
D	≥59.5%
F	<59.5%

Final grades are determined by the following breakdown:

Homework	25%
Quizzes	25%
Individual Projects	25%
Group Projects	25%

Please note that while I am happy to discuss grades (particularly if you feel something is miscalculated), I will not negotiate grades.

Academic Integrity: All homework and quizzes must be your own work. Any cases of academic dishonesty will be handled as dictated in the ATU student handbook.

1.) Homework: I encourage everyone to make an honest attempt to do homework assignments on their own. If you are 'stuck' on a problem I would suggest reviewing notes or searching online for help (here the phrase 'google is your friend' is very true). If you cannot find the solution using either of these methods, then you can reach out to myself or another student in the class for assistance. However, if you use any resources other than yourself to complete the homework, I

would strongly caution against 'blindly' copying without trying to understand what the code does. Keep in mind that the quizzes will test how well you actually understood the homework assignments!

2.) Quizzes: Quizzes should be your own work. No external resources are allowed unless otherwise specified. I am planning for quizzes to be done outside of our regular class time and I am expecting everyone to abide by an honor system while taking quizzes.
3.) Individual Projects: Individual projects will ask you to complete a coding task with relatively few constraints. I expect that many students will look for code examples online which is encouraged, but I would strongly caution against verbatim copying of someone else's code and passing it off as your own. That being said, I realize that a lot of code shares similarities and that you may choose to base what you do off of someone else's work. If you do this, be sure to 1) cite the code as part of your submission and 2) make edits to the code such that it is not a verbatim copy and paste job. Do what you can to make it your own.
4.) Group Projects: Group projects will be very similar in flavor to the individual projects but allow you to work with group members. Much of the discussion above for individual projects also applies here. Verbatim copying of someone else's code is tantamount to plagiarism. Make sure your group's submission adheres to the points listed above.

University Policies: This course will follow all the policies stipulated by the ATU student handbook 2020-2021. These policies include Code of Academic integrity, Academic misconduct, Failure for excessive absence policy, Disability services, Non-discrimination policy, Inclement weather policy. The student handbook can be found at https://www.atu.edu/studenthandbook/StudentHandbook-2020.pdf. I will follow all the rules and regulations outlined in the Student handbook and Faculty handbook to address any grievances in this class.

Title IX Statement: Arkansas Tech University does not discriminate on the basis of color, sex, sexual orientation, gender identity, race, age, national origin, religion, veteran status, genetic information, or disability in any of our practices, policies, or procedures. If you have experienced any form of discrimination or harassment, including sexual misconduct (e.g. sexual assault, sexual harassment, stalking, domestic or dating violence), we encourage you to report this to the institution. If you report such an incident of misconduct to a faculty or staff member, they are required by law to notify Arkansas Tech University's Title IX Coordinator and share the basic fact of your experience. The Title IX Coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off-campus. For more information please visit: http://www.atu.edu/titleix/index.php.

Disability Services: Arkansas Tech University values diversity and inclusion and is committed to a climate of mutual respect and full participation of all students. My goal is to create a learning environment that is useable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or prevent an accurate assessment of your achievement, please meet with me privately to discuss your needs and concerns. You may also contact the Office of Disability Services, located in Doc Bryan Student Center, Suite 141, in person, via phone at (479) 968-0302 or TTY (479) 964-3290, via email at disabilities@atu.edu, or visit their website at https://www.atu.edu/disabilities/index.php in order to initiate a request for accommodations. Third-Party Privacy and Accessibility Policies: https://www.atu.edu/etech/privacy_accessibility.php

University Testing: If you are a student that qualifies under the American with Disabilities Act (ADA) and requires accommodations please contact the Office of University Testing and Disability Services for information on appropriate policies and procedures. (Testing website: http://www.atu.edu/testing/).

Supporting Student Needs: There are community resources at ATU to assist students who face challenges securing their food or housing: https://www.atu.edu/localresources/ Anyone who feels that their particular situation may affect their performance in the course can notify the instructor if they are comfortable in doing so. If further support is needed please contact the Office of the Vice President for Student Services at 479-968-0238.

Attendance policy: Attendance for in-person classes is required and will be tracked by the instructor. Students are allowed a maximum of four unexcused absences. Absences will be excused for qualifying ATU sponsored events with appropriate documentation. Similarly, students with health-related absences (e.g., covid-19) will be excused provided relevant documentation from health services.

NOTE: Missing an excessive amount of class as defined above will lead to receiving a grade of FE (failure for excessive absences) for this course. Per the ATU faculty handbook, students will be warned prior to the assignment of this grade.

Blackboard: Announcements, assignments, and supplemental course material will be posted on blackboard. You can access blackboard at https://bblearn.atu.edu.

Email: ***Please check your email!*** Given the various uncertainties about how this semester will proceed in the pandemic, please pay attention to your email. I will send important messages and supplemental class materials to your Tech email, so keep an eye out for it.

Cell Phones & Other Electronic Devices: Please refrain from using your cell phone while in class. But you are allowed to bring a computer and follow along with the code examples if you wish 😊

Other Classroom Policies: Be respectful of your classmates- please refrain from eating, sleeping, and talking in class unless instructed to do so.

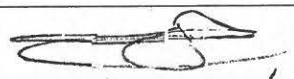
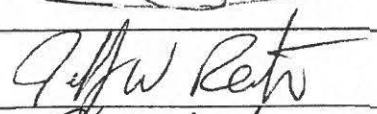
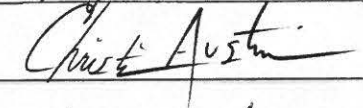
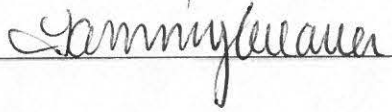
Syllabus content is subject to change at any time

Any item on the syllabus may change at the discretion of the instructor. All changes will be communicated to the class. Additionally, I reserve the right to adjust the grade scale as I deem necessary.

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Physical Sciences	06-28-2021

Title	Signature	Date
Department Head		7-1-2021
Dean		2021 July 1
Assessment		7.9.2021
Registrar		9/8/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Engineering Physics

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)

Several courses are added and deleted to prepare this program for accreditation by ABET. This includes

1- Adding MCEG 1002, MCEG 2013, MCEG 2033, MCEG 3313, MCEG/ELEG 4202.
2- Adding 3 hours of MCEG/ELEG/COMS elective.
3- Changing all other electives to be MCEG/ELEG/COMS.
4- Deleting Biological Science elective and CHEM 2134/2130
5- ~~Replacing PHYS 4213~~ Add 4023 by PHYS 4xx3 (Computational Physics). This is a new course and the description will be submitted along with this proposal.
6- Eliminating 6 hours of ~~Sci/Fine arts/Humanities~~ Social Sciences, 3 hours of Fine Arts/ Humanities or 0-3 hours Communicatio. This is allowed for engineering programs and essential for us to be able to have 46 hours of engineering classes and satisfy ABET requirements. For engineering programs, 6 hours of science classes can be counted toward social studies classes. UD mathor Require 3 hrs social science and 6 hrs Fine Arts/ Humanities
7- Replacing COMS 2803 by ~~COMS 2104~~. COMS 1013 and 1011
8- The rest of the requested changes are only moving the courses around. We are also offering PHS 3213 (Modern Physics) every spring.
9. Add PHYS 2000 and 2010
10. Delete 2 hours Elective
11. Delete ELEG/MCEG 4991 or 4951
12. Delete PHYS 4991
13. Delete 3hours UD Math
14. Allow PHYS 4213 or 3hours UD MATH

What impact will the change have on staffing, on other programs and space allocation?

None

Answer the following Assessment questions:

a. How does the program change align with the university mission?
Arkansas Tech is dedicated to student success and excellence. To achieve that we felt the curriculum for the engineering physics program must change. We are adding new courses to address what students will need upon graduation. We also add several courses that are pre-requisites for other courses that are already on the curriculum. That will help students to be more successful taking their classes without losing any information they would need from the previous courses.

b. If this change in the program is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable.
NA at the moment. However, the changes will help us satisfy the ABET accreditation criteria for engineering programs.

c. What is the rationale for this program change?
As mentioned above, several classes we have on the current curriculum have pre-req courses that are not on the current curriculum. In the past, we could justify students taking these courses by replacing the pre-req's with PHYS classes. However, over the years PHYS and MCEG courses have deviated and we cannot assume students learn what they need for an engineering class in a physics class. So, we are adding several of those engineering classes. We are also going to apply for ABET accreditation. It requires our program to have a minimum of 46 hours of engineering classes. The current curriculum does not have that. We are also deleting some of the courses that engineering physics students will not need in their future, including CHEM 2134 and biology.

d. How does this program fit in the current state of the discipline?
In order to make our engineering physics program more attractive to students, we need to make sure it is accredited by ABET. Several successful engineering physics programs have the accreditation. Currently Henderson State, John Brown University and Southern Arkansas University have accredited engineering programs where they offer engineering physics as an option.

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.)
A tentative plan for PLO's is attached.

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.

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

Curriculum Matrix for Catalog

Curriculum in Engineering Physics
(enter title for program changing)

Freshman Fall Semester	Freshman Spring Semester
Add/Change: COMS ~~2104 Foundations of Computer~~ 1013 Programming I. and COMS1011 Programming I Lab	Add/Change: PHYS 2114/2000 Calculus Based Physics I and Lab.
Delete: COMS 2803	Delete: CHEM 2134/2130
Total Hours: 16	Total Hours: 15
Sophomore Fall Semester	**Sophomore Spring Semester**
Add/Change: PHYS 2124/2010 Calculus Based Physics II and lab, MCEG 2013 Statics, MCEG 1002 Engineering Graphics. Social Sciences' 3hrs	Add/Change: ELEG 2103 Electric Circuits I, MCEG 2033 Dynamics, PHYS 3213 Modern Physics. Fine Arts' 3 hrs
Delete: Biological Sciences, PHYS 2114/2000 Social Sciences/Fine Arts/ Humanities/Communication 3hrs	Delete: Social Sci/Fine Arts,/Humanities/Comm (~~3 hrs~~, 6 hrs), PHYS 2124/2010, Gen Elective (2 hrs)
Total Hours: 16	Total Hours: 15

Junior Fall Semester	Junior Spring Semester
Add/Change: PHYS 3023 Mechanics (even) or PHYS 4013 Quantum Mechanics (odd), ELEG 2113 Electric Circuit II, ELEG 2111 Electric Circuits Lab, PHYS 3133 Electricity & Magnetism(even) or PHYS ~~4xx3~~ 4023 Computational Physics (odd) (Computational Physics, This is a new course to be proposed along with this), MCEG 3013 Mechanics of Materials. Fine Arts/ 3hrs Humanities' Delete: ELEG 2103, PHYS 3023 or PHYS 3213, PHYS 4113 or MATH Elective, PHYS 4213 or MCEG 3013 Social Sciences/Fine Arts/ Humanities' 3 hrs Total Hours: 16	Add/Change: US History & Government, PHYS 3003 Optics (even) or PHYS 4113 Advanced Lab (odd), PHYS 4213 Advanced Topics (or MATH UD) (even) or PHYS 4003 Thermodynamics and Stat. Mech(odd), ELEG/MCEG/COMS elective (3000-4000) (3 hrs.), MCEG/ELEG 4202. Delete: Social Sci/Fine Arts,/Humanities/~~Comm~~, ELEG 2113, ELEG 2111, PHYS 4003 or PHYS 3003, PHYS 4013 or PHYS 3133. Total Hours: 14
Senior Fall Semester	**Senior Spring Semester**
Add/Change: MCEG 4403Mechanics of Fluids and Hydraulics, PHYS 3023 Mechanics (even) or PHYS 4013 Quantum Mechanics (odd), PHYS 3133 Electricity & Magnetism(even) or PHYS ~~4xx3~~ 4023 Computational Physics (odd) (Computational Physics, This is a new course to be proposed along with this), MCEG ~~3033~~ 3133 Thermodynamics I. Delete: US History & Government, PHYS 3023 or PHYS 3213, PHYS 4113 or MATH Elective, PHYS 4213 or MCEG 3013, PHYS 4991.or 4951 Total Hours: 15	Add/Change: , PHYS 3003 Optics (even) or PHYS 4113 Advanced Lab (odd), PHYS 4213 Advanced Topics (or MATH UD) (even) or PHYS 4003 Thermodynamics and Stat. Mech(odd), PHYS 4951 Undergraduate Research in Physics. Add COMS to ELEG/MCEG Elective (3000-4000 level) Delete: MCEG 4403, PHYS 4003 or PHYS 3003, PHYS 4013 or PHYS 3133. ELEG/MCEG 4991 or 4951 Total Hours: 13

Tentative Engineering Physics PLO's

(I: Introduce, R: Reinforce, E: Emphasize)

PLO 1: An ability to identify, formulate and solve complex engineering problems by applying principles of engineering, science and mathematics

Performance Indicator		
State the fundamental laws of classical physics	PHYS 2114/2000, PHYS 2124/2010	I
Understand the fundamental concepts of quantum physics	Modern Physics. QM	R
Explain different natural phenomena using the fundamental concepts of classical and quantum physics	CM, E&M, Thermodynamics,	R
Develop ways to describe a specific phenomenon and formulate it	PHYS 4951	E

PLO 2: An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

Performance Indicator		
Recognize and apply the relevant laws of physics to the problem	Physics I and II, Modern physics	I
Use experimental, computational or theoretical methods to meet the desired needs.	CM, Thermodynamics, E&M, QM, Computational Physics	R
Design the needed system or develop the computer codes to solve the problem in hand.	PHYS 4951	E

PLO 3: An ability to develop and conduct appropriate experimentation, analyze and interpret data and use engineering judgement to draw conclusions.

Performance Indicator		
Conduct experiments and collect and analyze data	Physics I and II labs	I
Fit data into graphs, analyze and interpret the data using the fundamental laws of physics	Optics and Advanced Lab, Computational Physics	R
Plan experiments to test different hypotheses, analyze the data and recommend new ideas to improve the experiment.	PHYS 4951	E

PLO 4: An ability to communicate effectively with a range of audience.

Performance Indicator		
Present Content in their own words	Orientation II, Physics I and II labs	I
Organize and analyze the data in a meaningful and scientific way	Advanced lab	R
Prepare presentation and present them in local or national meetings	PHYS 4951	E
Criticize peers' presentations in a scientific way	PHYS 4951	E

PLO 5: An ability to function effectively on teams whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks and meet objectives.

Performance Indicator		
Perform effectively in teams to conduct experiments	Physics I and II labs	I
Show the ability to plan the experiments and meet the deadlines in group settings	Optics and Advanced Lab	R
Coordinate effectively within the team to plan the experiment, analyze the data and finalize the results	PHYS 4951	E

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: Mechanical Engineering	This department ☐ supports ☐ does not support the change.
Comments: Engineering Physics Program is adding MCEG 1002, MCEG 2013, MCEG 2033, MCEG 3313, MCEG/ELEG 4202 and COMS 2104 and eliminating COMS 2803.	

Department Head Signature: _____

Date: 6/30/21

ARKANSAS TECH UNIVERSITY

REQUEST FOR PROGRAM CHANGE

Department Initiating Proposal	Date
Physical Sciences	06-28-2021

Title	Signature	Date
Department Head		7-1-2021
Dean		2021 July 1
Assessment		7.9.2021
Registrar		9/8/21
Graduate Dean (Graduate Proposals Only)		
Vice President for Academic Affairs		

Committee	Approval Date
General Education Committee (Undergraduate Proposals Only)	
Teacher Education Committee (Graduate or Undergraduate Proposals)	
Curriculum Committee (Undergraduate Proposals Only)	
Faculty Senate (Undergraduate Proposals Only)	
Graduate Council (Graduate Proposals Only)	

Program Title:
Physics

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)

Several courses are added and deleted to prepare this program for accreditation by ABET. This includes

1- Adding PHYS 4xx3 (Computational Physics). This is a new course and the description will be submitted along with this proposal.
2- Replacing COMS 2803 by COMS 2104.
3- Adding MATH 4003 and STAT 2303 as required courses.
4- The rest of the requested changes are only moving the courses around. We are also offering PHS 3213 (Modern Physics) every spring.

4023
1013 and COMS 1011
PHYS
NOTE: see Summary next page

What impact will the change have on staffing, on other programs and space allocation?

None

Answer the following Assessment questions:

a. How does the program change align with the university mission?
Arkansas Tech is dedicated to student success and excellence. To achieve that we felt the curriculum for the physics program must change. We are adding some new courses to address what students will need upon graduation. We are also making sure that student research is done only in the senior year, when students have the opportunity to utilize what they have learned in the previous years.

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

c. What is the rationale for this program change?
The current curriculum includes several general elective classes. At the same time, several courses are now offered at a different time. The curriculum change addresses the second issue, while replacing some of the general elective courses with more appropriate MATH and STAT classes for physics majors. At the same time, a new course (PHYS 4xx3, computational physics) will be added to the curriculum that will prepare students for the current challenges that graduates will face.

d. How does this program fit in the current state of the discipline?
There are several physics programs in the state of Arkansas institutions. We are planning to be one of the first ones that obtains ANSAC accreditation. These new changes will help us with recruiting and keeping good students. Current curriculum doesn't address several new challenges our graduates will face. For example, data analysis and statistical methods are becoming more and more useful for physics graduates. We are adding a STAT course to address this. We are also adding a computational physics course to make sure our graduates are equipped with the necessary skills to enter the workforce or be successful in their graduate studies if they choose to.

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.)
A tentative plan for PLOs are attached.

Outline change in program:

1. Add the following courses:
   PHYS 2000: Physics Laboratory I
   PHYS 2010: Physics Laboratory II
   PHYS 3003: Optics
   PHYS 4023: Computational Physics
   PHYS 4213: Advanced Topics in Physics and Astronomy
   MATH 4003: Linear Algebra I
   STAT 2303: Statistical Methods

2. Delete the following courses:
   6 hours of 3000-4000 level Physics Elective
   3 hours of 3000-4000 level Mathematics Elective
   MATH 1914: Precalculus

3. Change PHYS 4951-4: Undergraduate Research in Physics or PHYS 4991-4: Special Problems in Physics and Astronomy, TO: PHYS 4951: Undergraduate Research in Physics

4. Require PHYS 4003: Thermodynamics and Statistical Mechanics, or 3 hours of 3000-4000 level Mathematics Elective excluding MATH 3003: Foundations of Number Systems, MATH 3033: Methods of Teaching Elementary Mathematics, and MATH 4113: History of Mathematics

5. Change COMS 2803 TO: COMS 1013: Programming I, and COMS 1011: Programming I Lab

6. Change Physical Science, Biology, Engineering, or Computer Science Electives from 7 hours to 9 hours requiring 3000-4000 level for 6 of the hours

7. Change General Electives from 10 hours to 5 hours

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.

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

Curriculum Matrix for Catalog Curriculum in_____Physics_____ (enter title for program changing)	
Freshman Fall Semester COMS 1013 Add/Change: COMS ~~2104 Foundations of Computer~~ Programming I, MATH 2914 Calculus I. COMS 1011 Programming I Lab Delete: Social Sci/Fine Arts/Humanities/Comm, MATH1914 ~~or MATH 1203~~ Total Hours: 16	Freshman Spring Semester Add/Change: PHYS 2114/2000 Calculus based Physics I, MATH 2924 Calculus II, Delete: MATH 2914, Social Science Total Hours: 16
Sophomore Fall Semester Add/Change: PHYS 2124/2010 Calculus Based Physics II, MATH 2934 Calculus III, Biological Sciences (4 hrs.). Delete: PHYS 2114/2000, COMS 2803, MATH 2924, General Elective. 3 hrs Total Hours: 15	Sophomore Spring Semester Add/Change: ELEG 2103 Electric Circuits I, PHYS 3213 Modern Physics, MATH 3243 Differential Equations I, General Elective. Delete: Biological Sciences, PHYS 2124/2010, MATH 2934 Total Hours: 15
Junior Fall Semester Add/Change: PHYS 3023 Mechanics (even) or PHYS 4013 Quantum Mechanics (odd), ELEG 2113 Electric Circuits II, ELEG 2111 Electric Circuits Lab, PHYS 3133 Electricity and Magnetism (even) or PHYS ~~4xx3~~ 4023 Computational Physics(odd) (Computational Physics, This is a new course to be proposed along with this), STAT 2303 Statistical Methods. Delete: ELEG 2103, MATH 3243, PHYS 3023 or PHYS 3213, PHYS ~~3133~~ 4113 or PHYS Elective(3000-4000) Total Hours: 16	Junior Spring Semester Add/Change: PHYS 3003 Optics (even) or PHYS 4113 Advanced Lab(odd), PHYS 4213 Advanced Topics (or MATH UD) (even) or PHYS 4003 Thermodynamics and Stat. Mechanics (odd), General Elective (3000-4000). Delete: ELEG 2113, ELEG 2111, PHYS 4013 or PHYS ~~4113,~~ 3133 PHYS elective (3000-4000). 3 hrs Total Hours: 14

Senior Fall Semester	Senior Spring Semester
Add/Change: Social Sci/~~Fine Arts/Humanities/Comm~~, PHYS 3023 Mechanics(even) or PHYS 4013 Quantum mechanics (odd), PHYS 3133 Electricity & Magnetism (even) or PHYS ~~4xx3~~ 4023 Computational Physics(odd) (Computational Physics, This is a new course to be proposed along with this), MATH 4003 Linear Algebra I.	Add/Change: Social Sci/Fine Arts/Humanities/Comm, PHYS 3003 Optics (even) or PHYS 4113 Advanced lab (odd), PHYS 4213 Advanced Topics (or MATH UD) (even) or PHYS 4003 Thermodynamics & Stat. Mechanics (odd), PHYS 4951 Undergraduate Research in Physics. General ~~Elective (3000-4000) (3 hrs).~~
Delete: PHYS 3023 or PHYS 3213, PHYS ~~3133~~ 4113 or PHYS elective (3000-4000), MATH elective (3000-4000), 3hrs General Elective (3 hrs).	Delete: PHYS 4013 or PHYS ~~4113~~ 3133. MATH Elective (3000-4000), PHYS 4991-4 or PHYS 4951-4 3hrs
Total Hours: 15	Total Hours: 13

Tentative Physics PLO's (Subject to change to satisfy ANSAC criteria)

(I: Introduce, R: Reinforce, E: Emphasize)

PLO 1: An ability to identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to classical and modern physics.

Performance Indicator		
State the fundamental laws of classical physics	PHYS 2114/2000 & 2124/2010	I
Understand the fundamental concepts of quantum physics	PHYS 3213, PHYS 4013	R
Explain different natural phenomena using the fundamental concepts of classical and quantum physics	PHYS 3023, PHYS 3133, PHYS 4003	R
Develop ways to describe a specific phenomenon and formulate it	PHYS 4951	E

PLO 2: An ability to formulate or design a system, procedure or program to meet desired needs.

Performance Indicator		
Recognize and apply the relevant laws of physics to the problem	PHYS 2114/2000, PHYS 2124/2010, PHYS 3213	I
Use experimental, computational or theoretical methods to meet the desired needs.	PHYS 3023, PHYS 3133, PHYS 4013, PHYS 4xx3 (Computational Physics)	R
Design the needed system or develop the computer codes to solve the problem in hand.	PHYS 4951	E

PLO 3: An ability to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgement to draw conclusion.

Performance Indicator		
Conduct experiments and collect and analyze data	PHYS 2000, PHYS 2010	I
Fit data into graphs, analyze and interpret the data using the fundamental laws of physics	PHYS 3003, PHYS 4113	R
Plan experiments to test different hypotheses, analyze the data and recommend new ideas to improve the experiment.	PHYS 4951	E

PLO 4: An ability to communicate effectively with a range of audience.

Performance Indicator		
Present Content in their own words	PHSC 1011, PHYS 2000, PHYS 2010	I
Organize and analyze the data in a meaningful and scientific way	PHYS 4113	R
Prepare presentation and present them in local or national meetings	PHYS 4951	E
Criticize peers' presentations in a scientific way	PHYS 4951	E

PLO 5: An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.

Performance Indicator		
Perform effectively in teams to conduct experiments	PHYS 2000, PHYS 2010	I
Show the ability to plan the experiments and meet the deadlines in group settings	PHYS 3003, PHYS 4113	R
Coordinate effectively within the team to plan the experiment, analyze the data and finalize the results	PHYS 4951	E

Arkansas Tech University
DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

Department Affected: Mathematics	This department ☑ supports ☐ does not support the change.
Comments: Physics curriculum is adding STAT 2303 and MATH 4303 as requirements.	

Department Head Signature: Jeanine L. Myer

Date: 6/28/21