ACADEMIC ITEM APPROVAL MEMORANDUM

Compiled here are academic items approved since the November Board of Regents Meeting. This memorandum from December 2021, January 2022, and February 2022 contains items for which approval authority has been designated by the Board of Regents to the individual institutions or the Commissioner of Higher Education. The items before you have been approved and are now being shared with you for your notification.

- October 2021 Academic Item Memorandum
- November 2021 Academic Item Memorandum
- December 2021 Academic Item Memorandum
- January 2022 Academic Item Memorandum

ACADEMIC ITEMS MEMORANDUM

DATE: Nov. 21, 2021

TO: Chief Academic Officers, Montana University System

FROM: Brock Tessman, Deputy Commissioner for Academic, Research, and Student Affairs

RE: October 2021 Academic Items

Contained within this memorandum are Level I and Level II proposals submitted by the institutions of the Montana University System in October 2021. These proposals include items for which approval authority has been designated by the Board of Regents to the individual institutions or the Commissioner of Higher Education. These Level I items are being sent to you for your review. If you have concerns about a particular proposal, you should share those concerns with your colleagues at that institution and try to come to some understanding. If you cannot resolve your concerns, raise them at the Chief Academic Officer's conference call on December 14th. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, December 17th. You will be notified of approved proposals by December 21st. The Board of Regents will be notified of the approved proposals at the January meeting of the Board.

LEVEL I ITEMS:

1. Campus Approvals

Montana State University Bozeman:

 Notification of placing the Associate Degree RN – Master of Nursing program into moratorium Item #2010-LI1021 | Moratorium Form

Montana Technological University:

- Notification of placing both options in the Accounting Technology AAS and the CAS in Bookkeeping into moratorium
 - Item #1502-LI1121 | Moratorium Form
- Notification of placing both options in the Business Technology AAS and the Business Technology CAS in moratorium
 - Item #1503-LI1121 | Moratorium Form

2. OCHE Approvals

Montana Technological University:

- Request for authorization to terminate the Medical Assistant AAS Item #1501-LI1121 | Termination Form
- Request for authorization to terminate the Behavioral Health Certificate Item #1504-LI1121 | Termination Form

Helena College University of Montana:

• Request for authorization to terminate the Administrative Support & Management Program Item #197-1902-LI1121 | Termination Form

ACADEMIC PROPOSAL REQUEST FORM

SUBMISSION MONTH/YEAR: October 2021

ITEM 2010-LI0121

TEM TITLE: Request to	place the Associate Degree RN- Master's of Nu	rsing program into moratorium
Institution:	Montana State University	CIP Code: 513820
Program/Center/Institute Title:	College of Nursing Associate Degree Register Nurs	e to Master's of Nursing
	Face-to-face Offering: Online Offering:	
Options:		
Why : Low program enrollr competencies provide an o	Proposal Summary [360 words ming is placing the ADRN-MN program in moratorium ment and recent revision of the American Association opportunity to assess the market and possible revision requested for this proposal.	n of Colleges of Nursing Essential professional
ATTACHMENTS	· ·	
Attachments		
following the type of requ	te type of request and submit with any additional mest. For more information pertaining to the types of as please visit http://mus.edu/che/arsa/academicpro	requests listed below, how to complete an item
Campus Approvals		
1a. Placing a	postsecondary educational program into moratoriu	m (Program Termination and Moratorium Form)
1b. Withdraw	ving a postsecondary educational program from mo	ratorium
2. Establishin	g, re-titling, terminating or revising a campus certif	icate of 29 credits or less
3. Establishin	g a B.A.S./A.A./A.S. area of study	
4. Offering ar	n existing postsecondary educational program via d	istance or online delivery
OCHE Approvals		
5. Re-titling a	n existing postsecondary educational program	

6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9. Revising a postsecondary educational program (Curriculum Proposal Form)
10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. Level II:
1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form
2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11
 4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Pro	ogram Title: Associa	te Degree RN to Master's	of Nursing (Clinical Nurs	e Leader)
Pro	ogram is being <u>x</u> PI	aced into moratorium	Terminated	
1.	Are there currently stu answer questions a - c	dents enrolled in the prog below.)	ram? (If yes, please	Y: <u>x</u> N:
	prior to matriculat	am is designed to have 12 o ing into the MN coursewor credits of bridge coursewo	k. There is one student.	This student has
		urrently enrolled in the pro	_	Y: <u>x</u> N:
	and informed of the	e imperioring termination,	moratoriam.	
		is currently enrolled has c program and will not be af		_
	b.) What is the expect	ed graduation date of all s	tudents from the progra	m?
	The current stud	ent will finish the MN port	ion of the degree Summe	er 2022.
	-	ngs been planned to allow te the degree in a reasona		Y: <u>x</u> N:
		urses are available and the of the degree by Summer c	-	nt will complete the
2.		or changes in working con ratorium? (If yes, please a		Y: N: _x
				Y: <u>x</u> N:

PROGRAM TERMINATION/MORATORIUM FORM

	a.) Have the faculty affected by the program termination/moratorium been notified?
	Yes.
	b.) Please describe any layoffs that will occur including the date expected?
	No layoffs will occur.
3.	The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):
	a.) Internal Curriculum Committees
	The College of Nursing Graduate Academic Affairs Committee has been notified.
	b.) Faculty Senate N/A
	c.) Program Public Advisory CommitteeN/A
	d.) Articulation Partners N/A
4.	Has there been any negative feedback received from students, faculty, or Y: x N: other constituents regarding the impending termination/moratorium? (If yes, please explain below.)
	We had one potential applicant who hoped to begin the program express disappointment.

ACADEMIC PROPOSAL REQUEST FORM

September/2021

ITEM 1502-LI1121

	Institution:	Highlands College	CIP Code: 520302
Program/Cent	er/Institute Title:	Accounting Technology	
Includes (pleas	se specify below):	Face-to-face Offering: X Online Offering:	X Blended Offering: X
	Options:	Human Resources and Health Services. C	AS in Bookkeeping
		Proposal Summary [360	words maximum]
	•	ng the Accounting Technology AAS – two oping in moratorium.	ptions, Human Resources and Health Sciences, and the
Why: Low er	nrollment num	bers and loss of the instructor.	
Resources: N	N/A		
A TT A CLIP 45	NITC		
ATTACHME None	ENTS		
None Please mark following the	the appropria e type of reque	• • • • • • • • • • • • • • • • • • • •	itional materials, including those listed in parentheses types of requests listed below, how to complete an item demicproposals.asp.
None Please mark following the	the appropria e type of reque additional form	est. For more information pertaining to the	types of requests listed below, how to complete an item
Please mark following the request, or a	the appropria e type of reque additional form	est. For more information pertaining to the	types of requests listed below, how to complete an item
Please mark following the request, or a	the appropria e type of reque additional form vel I: us Approvals	est. For more information pertaining to the as please visit http://mus.edu/che/arsa/aca	types of requests listed below, how to complete an item
None Please mark following the request, or a X A. Lev Campo	the appropria e type of reque additional form vel I: us Approvals 1a. Placing a p	est. For more information pertaining to the as please visit http://mus.edu/che/arsa/aca	types of requests listed below, how to complete an item demicproposals.asp. noratorium (Program Termination and Moratorium Form)
None Please mark following the request, or a X A. Le Campo X	the appropriate type of requested it is the approvals of the appropriate of the appropria	est. For more information pertaining to the as please visit http://mus.edu/che/arsa/aca	types of requests listed below, how to complete an item demicproposals.asp. noratorium (Program Termination and Moratorium Form) from moratorium
Please mark following the request, or a Campo	the appropriate type of requested ditional form vel I: us Approvals 1a. Placing a place of the place of th	est. For more information pertaining to the as please visit http://mus.edu/che/arsa/aca costsecondary educational program into many a postsecondary educational program	types of requests listed below, how to complete an item demicproposals.asp. noratorium (Program Termination and Moratorium Form) from moratorium

IE A	pprovals
5.	. Re-titling an existing postsecondary educational program
6.	. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
7.	. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
8.	. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9.	. Revising a postsecondary educational program (Curriculum Proposal Form)
- 1(0. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
_ 1	1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Forn
	2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
-	
_	3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11
4	
	1. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
	<u> </u>

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Pro	ogram Title: Accounting Technology AAS			
Pro	ogram is being X Placed into moratorium Terminated			
1.	Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)	Y:	N:	<u>x</u>
	a.) Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?	Y:	N:	
	b.) What is the expected graduation date of all students from the program	m?		
	c.) Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?	Y:	N:	
2.	Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)	Y: <u>X</u>	N:	
	a.) Have the faculty affected by the program termination/moratorium been notified?	Y:	N:	х

PROGRAM TERMINATION/MORATORIUM FORM

	layoffs as the faculty member passed aw	cur including the date expected? There were no vay.
3.	The following parties, where applicable, ha termination/moratorium. (Please mark X fo	
	a.) Internal Curriculum Committees	x
	b.) Faculty Senate	x
	c.) Program Public Advisory Committee	x
	d.) Articulation Partners	x
4.	Has there been any negative feedback rece other constituents regarding the impending yes, please explain below.)	

ACADEMIC PROPOSAL REQUEST FORM

September/2021

ITEM 1503-LI1121

Notification of placing t	he Business Technology AAS, both options and CAS' within in moratorium
Institution:	Highlands College CIP Code: 520401
Program/Center/Institute Title:	Business Technology
Includes (please specify below): Options:	Face-to-face Offering: X Online Offering: X Blended Offering: X Medical Office Specialist with embedded CAS Medical Receptionist and Administrative Computer Specialist with embedded CAS Office Assistant
	Proposal Summary [360 words maximum]
•	ng the Business Technology AAS – two options, Medical Office Specialist with the embedded CAS Administrative Computer Specialist with the embedded CAS Office Assistant in moratorium.
Why: Low enrollment num	bers
Resources: N/A	
ATTACHMENTS None	
following the type of reque	te type of request and submit with any additional materials, including those listed in parentheses est. For more information pertaining to the types of requests listed below, how to complete an item as please visit http://mus.edu/che/arsa/academicproposals.asp .
X A. Level I:	
Campus Approvals	
1a. Placing a	postsecondary educational program into moratorium (Program Termination and Moratorium Form)
1b. Withdraw	ring a postsecondary educational program from moratorium
2. Establishin	g, re-titling, terminating or revising a campus certificate of 29 credits or less
3. Establishin	g a B.A.S./A.A./A.S. area of study
4. Offering an	existing postsecondary educational program via distance or online delivery

5.	Re-titling an existing postsecondary educational program
6.	Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
7.	Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
8.	Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9.	Revising a postsecondary educational program (Curriculum Proposal Form)
10	D. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
). I EV	el II:
Lov	
	el II: Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form
1	. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed)
1 2	. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form
1 2 3	Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form) Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
1 2 3 2	 Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form) Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form) Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11 Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Pro	ogram Title: Business Technology			
Pro	ogram is being X Placed into moratorium Terminated			
1.	Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)	Y:	N:	x
	a.) Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?	Y:	N:	
	b.) What is the expected graduation date of all students from the program	m?		
	c.) Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?	Y: <u>X</u>	N:	
2.	Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)	Y: <u>X</u>	N:	
	a.) Have the faculty affected by the program termination/moratorium been notified?	Y: <u>X</u>	N:	

PROGRAM TERMINATION/MORATORIUM FORM

b.) Please describe any layoffs that will occur including the date expected? No layoffs are

	expected although changes have been n duties have been assigned per administr	nade to remaining faculty credit load and other ration.	
3.	The following parties, where applicable, ha termination/moratorium. (Please mark X for	ive been notified of the impending program or completed, NA for not applicable):	
	a.) Internal Curriculum Committees	x	
	b.) Faculty Senate	x	
	c.) Program Public Advisory Committee	x	
	d.) Articulation Partners	x	
4.	Has there been any negative feedback rece other constituents regarding the impending yes, please explain below.)		

ACADEMIC PROPOSAL REQUEST FORM

SEPTEMBER/2021

ITEM 1501-LI1121

Notification of the term	ination of the Medical Assistant AAS		
Institution	Highlands College	CIP Code:	510801
Program/Center/Institute Title	Medical Assistance AAS		
	Face-to-face Offering: X Online Offering: X	Blended Offering:	<u>x</u>
Options	N/A		
	Proposal Summary [360 words m	naximum]	
What: Notification of the	termination of the Medical Assistant AAS at Highland	ds College	
Why: Low enrollment nun	nbers		
Resources: N/A			
ATTACHMENTS None			
following the type of requ	te type of request and submit with any additional mest. For more information pertaining to the types of ns please visit http://mus.edu/che/arsa/academicpr	requests listed be	•
X A. Level I:			
Campus Approvals			
1a. Placing a	postsecondary educational program into moratori	um (Program Termir	nation and Moratorium Form)
1b. Withdray	ving a postsecondary educational program from mo	oratorium	
2. Establishir	g, re-titling, terminating or revising a campus certi	ficate of 29 credits	or less
3. Establishir	g a B.A.S./A.A./A.S. area of study		
4. Offering a	n existing postsecondary educational program via c	listance or online	delivery
			

	Approvals
!	5. Re-titling an existing postsecondary educational program
x	6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
	7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
	8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
	9. Revising a postsecondary educational program (Curriculum Proposal Form)
:	10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. Le	vel II:
B. Le	vel II: 1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form
<u>B. Le</u>	
B. Le	 Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed
B. Le	 Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
B. Le	 Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form) Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form) Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11 Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Pro	Program Title: Medical Assistant AAS				
Pro	Program is being Placed into moratoriumX Terminated				
1.	Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)	Y :	N:	x	
	a.) Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?	Y:	N:		
	b.) What is the expected graduation date of all students from the program	n?			
	c.) Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?	Y:	_ N:		
2.	Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)	Y: <u>X</u>	N:		
	a.) Have the faculty affected by the program termination/moratorium been notified?	Y: <u>X</u>	N:		

PROGRAM TERMINATION/MORATORIUM FORM

	b.) Please describe any layoffs that will occ layoffs in the program area.	cur including the date expected? There were two	
3.	The following parties, where applicable, ha termination/moratorium. (Please mark X fo		
	a.) Internal Curriculum Committees	x	
	b.) Faculty Senate	x	
	c.) Program Public Advisory Committee	x	
	d.) Articulation Partners	x	
4.	Has there been any negative feedback rece other constituents regarding the impending yes, please explain below.)		

ACADEMIC PROPOSAL REQUEST FORM

September 2021

ITEM 1504-LI1121

Notification of the termi	nation of the Behavioral Health Certificate		
Institution:	Highlands College	CIP Code:	513902
Program/Center/Institute Title:	Behavioral Health Certificate		
	Face-to-face Offering: X Online Offering: X		_x
Options:	N/A		
	Proposal Summary [360 words m	naximum]	
What: Notification of the to	ermination of the Behavioral Health Certificate.		
Why: Low enrollment num	bers and layoff.		
Resources: N/A			
ATTACHMENTS None			
following the type of reque	te type of request and submit with any additional mest. For more information pertaining to the types of s please visit http://mus.edu/che/arsa/academicpr	requests listed be	•
x A. Level I:			
Campus Approvals			
1a. Placing a p	postsecondary educational program into moratorio	um (Program Termir	nation and Moratorium Form)
1b. Withdraw	ing a postsecondary educational program from mo	oratorium	
2. Establishing	g, re-titling, terminating or revising a campus certi	ficate of 29 credits	s or less
3. Establishing	g a B.A.S./A.A./A.S. area of study		
4. Offering an	existing postsecondary educational program via c	listance or online	delivery

5 	. Re-titling an existing postsecondary educational program
6	. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
7	. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
8	. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9	. Revising a postsecondary educational program (Curriculum Proposal Form)
1	0. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
	rel II: 1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form
:	 Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed
: :	1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form
:	 Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
:	 Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form) Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form) Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11 Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Pro	gram Title:	Behavioral Health Certificate						
Program is being Placed into moratoriumX Terminated								
1.		ently students enrolled in the p ons a - c below.)	rogram?	(If yes, please	Y: _		N:	<u>x</u>
	=	udents currently enrolled in the ned of the impending termination			Y: _		N:	
	b.) What is the	e expected graduation date of a	all studen	ts from the progra	m?			
	-	se offerings been planned to all o complete the degree in a reas			Y: _		N:	
2.	-	y layoffs or changes in working tion/moratorium? (If yes, pleas			Y: _	x	N:	
	a.) Have the fa been notifi	aculty affected by the program ied?	terminat	ion/moratorium	Y:	x	N:	
	b.) Please desc	cribe any layoffs that will occur	· includin	g the date expected	d? One	layof	f.	

PROGRAM TERMINATION/MORATORIUM FORM

3. The following parties, where applicable, have been notified of the impending program termination/moratorium. (Please mark X for completed, NA for not applicable):		
	a.) Internal Curriculum Committees	x
	b.) Faculty Senate	x
	c.) Program Public Advisory Committee	x
	d.) Articulation Partners	x
4.	Has there been any negative feedback receive other constituents regarding the impending tyes, please explain below.)	

ACADEMIC PROPOSAL REQUEST FORM

October/2021

ITEM 197-1902-R 1121

ITEM TITLE: Request for	Authorization to Terminate the Administrative	ve Support & Management Program
Institution:	Helena College	CIP Code: 52.0401
Program/Center/Institute Title:	Administrative Support & Management	
Includes (please specify below): Options:	Face-to-face Offering: Online Offering: Administrative Support Management AAS, Admin Support CAS, Medical Administrative Support Ma Support CAS	• • • •
	Proposal Summary [360 words r	maximum]
	Support & Management Program and all the degre ally be terminated at the end of spring semester 20	·
decreased employer dema officially placed in morator	degree options have had a steady decline in enrolle and for the degree and certificate options and a dec rium in spring 2020. The official termination date of lete and for degrees and/or certificates to be award	creased student demand. The program was f end of spring 2022 allows all remaining students
2019-2020 academic year, year. Students have compl affected by the program to	ny resource needs for this program. The full-time parties of there haven't been any personnel costs attached eted the program specific courses and are currentle ermination. The two students currently in the program of spring 2022 allows one additional semester, if needs	ed to the program since the 2019-2020 academic ly taking general education or business courses not ram are expected to graduate in December 2021,
ATTACHMENTS Attachments: Program	n Termination Form	
following the type of requ	te type of request and submit with any additional rest. For more information pertaining to the types on please visit http://mus.edu/che/arsa/academicp	of requests listed below, how to complete an item
A. Level I:		
Campus Approvals		
1a. Placing a	postsecondary educational program into moratori	ium (Program Termination and Moratorium Form)

1b. Withdrawing a postsecondary educational program from moratorium
2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
3. Establishing a B.A.S./A.A./A.S. area of study
4. Offering an existing postsecondary educational program via distance or online delivery
OCHE Approvals
5. Re-titling an existing postsecondary educational program
6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9. Revising a postsecondary educational program (Curriculum Proposal Form)
10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. Level II:
1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form
2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11
4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
5. Re-titling an academic, administrative, or research unit

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Pro	Program Title: Administrative Support & Management (Program includes AAS in Administrative Support Management, CAS in Administrative Support, CAS in Legal Administrative Support, AAS in Medical Administrative Support Management, and CAS in Medical Administrative Support.)				
Pro	ogram is being Placed into moratoriumX Terminated				
1.	Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)	Y :	X	N:	
	a.) Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?	Y:	X	N:	
	b.) What is the expected graduation date of all students from the program December 2021	n?			
	c.) Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?	Y:	X	N:	
2.	Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)	Y:		N:	Х
	There are currently no full-time faculty or adjunct faculty teaching courses	for th	is pro	gran	١.
	a.) Have the faculty affected by the program termination/moratorium been notified?	Y:		N:	X

PROGRAM TERMINATION/MORATORIUM FORM

The prior full-time faculty left the program for another position, prompting the program moratorium in spring 2020

b.) Please describe any layoffs that will occur including the date expected?

No faculty or staff attached to the program in moratorium

3.	The following parties, where applicable, have termination/moratorium. (Please mark X for	
	a.) Internal Curriculum Committees	x
	b.) Faculty Senate	x
	c.) Program Public Advisory Committee	x
	d.) Articulation Partners	x
4.	Has there been any negative feedback receiv other constituents regarding the impending t yes, please explain below.)	

ACADEMIC ITEMS MEMORANDUM

DATE: Dec. 6th, 2021

TO: Chief Academic Officers, Montana University System

FROM: Brock Tessman, Deputy Commissioner for Academic, Research, and Student Affairs

RE: November 2021 Academic Items

Contained within this memorandum are Level I and Level II proposals submitted by the institutions of the Montana University System in November 2021. These proposals include items for which approval authority has been designated by the Board of Regents to the individual institutions or the Commissioner of Higher Education. These Level I items are being sent to you for your review. If you have concerns about a particular proposal, you should share those concerns with your colleagues at that institution and try to come to some understanding. If you cannot resolve your concerns, raise them at the Chief Academic Officer's conference call on December 14th, 2021. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, December 17th. You will be notified of approved proposals by December 21st. The Board of Regents will be notified of the approved proposals at the January meeting of the Board.

LEVEL I ITEMS:

1. OCHE Approvals

Montana State University Bozeman:

- Request for temporary authorization to establish an A.A.S. in IT Cybersecurity Item #2010-LI1121
- Request for temporary authorization to establish an A.A.S. in Network Technology Item #2011-LI1121
- Request for temporary authorization to establish an A.A.S. in Aviation Electronics Technology Item #2012-LI1121
- Request for temporary authorization to establish a C.A.S. in Carpentry Item #2013-LI1121

Montana Technological University

 Request for temporary authorization to establish an A.A.S. in Welding Technology and to substantially revise the existing C.T.S. and C.A.S.

Item #1501-LI1121

ACADEMIC PROPOSAL REQUEST FORM

SUBMISSION MONTH/YEAR: November 2021

ITEM 2010-LI11121

ITEM TITLE Request for authorization to establish a temporary AAS in IT Cyber Security
Institution: Gallatin College Montana State University CIP Code: 52.2101
Program/Center/Institute Title: Temporary Associate of Applied Science in Information Technology (IT) Cyber Security
Includes (please specify below): Face-to-face Offering: Online Offering: Blended Offering:
Options:
Proposal Summary [360 words maximum]
What: Request to establish a temporary <u>Associate of Applied Science degree in Information Technology (IT) Cyber Security</u> . This degree prepares students to support the information security needs of businesses. Upon successful completion of the program students will be able to identify cyber threats, implement and maintain proper security measures, respond to system intrusions and provide creative solutions to emerging risks. A primary goal of this program is to prepare students to sit for certifications including CompTIA Security+, CompTIA Network+, CompTIA CySA+, and EC-Council's Certified Ethical Hacker v10.
This program will build upon an existing CAS in IT Network Technology, developed in fall 2017, as these courses provide fundamental instruction for more advanced cyber security courses.
Why: Gallatin College currently offers a CTS in Cyber Security for IT Network Technology program graduates and IT professionals in the community. An AAS offering will provide a clear pathway for prospective students to obtain an IT Cyber Security degree without prior IT certification.
The need for a skilled information technology workforce is in high demand. Through 2030, the MT Department of Labor and Industry projects 34 annual job openings for Computer Network Support Specialists and 207 annual openings for Computer User Support Specialists across the state with 71 of these combined positions projected annually in Southwest Montana. These positions earn an average annual wage of \$54,970 and \$46,940 respectively, which will allow our program graduates to remain in our region and enter the workforce at a strong starting wage. Potential advancement opportunities for these graduates include careers as Information Security Analysts or Computer and Information Systems Manager, earning average annual wage of \$77,590 and \$107,050 respectively.
The college's IT advisory council and local industry partners have also emphasized the need for AAS-level cyber security graduates in the local workforce. Partners include representatives from Granite Technology Solutions, Fisher's Technology, SAV Digital Environments, Lands' End, TechLink, MSU University IT, and Right Networks.
Resources: This associates degree will build upon an existing IT Network Technology CAS, thus, few resources will be needed to launch and sustain it. The need of one or two additional non-tenure-track instructors will be covered by Mill Levy funding.
ATTACHMENTS None

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

<u>х</u> А. І	Level I:
Can	npus Approvals
	1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form)
	1b. Withdrawing a postsecondary educational program from moratorium
	 Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
	3. Establishing a B.A.S./A.A./A.S. area of study
	4. Offering an existing postsecondary educational program via distance or online delivery
OCI	HE Approvals
	5. Re-titling an existing postsecondary educational program
	6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
	7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
	8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
	9. Revising a postsecondary educational program (Curriculum Proposal Form)
x	10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years —
<u>B.</u>	<u>Le</u> vel II:
	1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form)
	2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
	3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11

4.	. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum
	Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)

ACADEMIC PROPOSAL REQUEST FORM

SUBMISSION MONTH/YEAR: November, 2021

ITEM 2011-LI1121

ITEM TITLE Request for a	authorization to establish a temporary AAS ir	n IT Network Technology		
Institution:	Gallatin College Montana State University	CIP Code: 11.0901		
Program/Center/Institute Title:	Temporary Associate of Applied Science in Info	ormation Technology (IT) Network Technology		
Includes (please specify below):	Face-to-face Offering: X Online Offering:	Blended Offering:		
Options:				
Proposal Summary [360 words maximum]				
What: Request to establish a temporary Associate of Applied Science degree in Information Technology (IT) Network Technology. The AAS IT networking technology curriculum will prepare students to plan, design, implement, troubleshoot and administer microcomputer-based networks. Topics include computer hardware, software and applications; local area and wide area networking; principles of information systems security; disk space and traffic load monitoring; data backup; resource allocation; and setup and takedown procedures. This program will also introduce the design, implementation, and management of linked systems of computers, and peripherals, to maximize efficiency and productivity, and prepare individuals to function as network generalist. A final goal of this program is to prepare students to sit for the following certifications: CompTIA Network+, CompTIA A+, CompTIA Linux+, CompTIA Security+, Cisco CCNA, and Microsoft 70-740.				
This program builds upon the existing Certificate of Applied Science in Network Technology, developed in fall 2017, which will continue being offered at Gallatin College.				
and Industry projects 34 and User Support Specialists ac positions earn an average in our region and enter the	nnual job openings for Computer Network Suppo cross the state with 71 of these combined positio annual wage of \$54,970 and \$46,940 respectively workforce at a strong starting wage. Advancements and Information Syster			
Gallatin College's IT program advisory council and local industry partners have emphasized the need for AAS-level network technology graduates in the local workforce. Partners include representatives from Granite Technology Solutions, Fisher's Technology, SAV Digital Environments, Lands' End, TechLink, MSU University IT, Right Networks, and MSU Billings IT. Previous and current IT students have also requested this AAS option.				
	degree will build upon an existing Network Tech need of one or two additional non-tenure-track in	nology CAS, thus, few resources will be needed to nstructors will be covered by Mill Levy funding.		
ATTACHMENTS none				

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

A. Level I:

Campus Approvals
1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form)
1b. Withdrawing a postsecondary educational program from moratorium
2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
3. Establishing a B.A.S./A.A./A.S. area of study
4. Offering an existing postsecondary educational program via distance or online delivery
OCHE Approvals
5. Re-titling an existing postsecondary educational program
6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9. Revising a postsecondary educational program (Curriculum Proposal Form)
X 10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. Level II:
1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form)
2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11

4.	Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or
	Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
5.	Re-titling an academic, administrative, or research unit

ACADEMIC PROPOSAL REQUEST FORM

November/2021

ITEM 2012-LI1121

ATTACHMENTS

Request for authorization to establish a temporary AAS in Aviation Electronics Technology				
Institution:	Gallatin College Montana State U	Iniversity	CIP Code: 47.0609	
Program/Center/Institute Title:	AAS Aviation Electronics_Technol	ogy		
Includes (please specify below):	Face-to-face Offering: X Online	e Offering:	Blended Offering:	
Options:				
Proposal Summary [360 words maximum]				
What: Notification of the temporary establishment of an <u>Associate of Applied Science in Aviation Electronics Technology</u> . This 62-credit program will teach students the theoretical and technical applications of aviation electronics (avionics) within the aviation/aerospace industry. Through hands-on training with aircraft electronics students will test, troubleshoot, and repair components for communication, navigation, instruments, and control systems. Successful program graduates will be prepared to earn industry recognized certifications and work as entry level technicians in the aircraft electronics maintenance and repair field or similar electronics-system industries.				
Why: Bozeman, Montana is the fastest growing micropolitan in the country. Bozeman Yellowstone International Airport is Montana's busiest airport, setting passenger records for the past decade. With continued population and tourism growth, development and support of the commercial and private aviation/aerospace industry is critical to the success of Gallatin Country and Montana economies.				
The US Bureau of Labor Statistics projects eight percent job growth for avionic technicians through 2030. Locally, Bridger Aerospace of Belgrade anticipates even higher growth in the immediate future. Bridger Aerospace is a nationwide industry leader in aerial wildfire suppression and management. Despite having five internal avionic technicians, the lack of prospective local technicians has delayed critical services and made them dependent on overwhelmed out-of-town avionic shops. To meet these needs, Bridger Aerospace requested that Gallatin College develop this program.				
The company also plans to address the statewide shortage of avionic technicians. As capacity allows, they service other client planes, but have a waitlist of around 100 planes. Desiring to hire 15 more avionic technicians in the coming year, Bridger Aerospace has committed startup funding for Gallatin College's AAS program as well as classroom and lab space at their facility Additional space and technicians will allow the company to quickly repair their own fleet and serve numerous local aviation clients who outsource work to Billings, Kalispell or Idaho and face 4-12 month waitlists.				
Resources: Bridger Aerospace has committed \$100,000 to Gallatin College to develop an avionics technician training program. This will cover anticipated resources including program marketing, classroom/lab materials, and instructor wages. They will also provide on-site classroom space and training equipment including aircraft, test equipment, and tools. A fund agreement has been established with MSU Foundation.				

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

A. Level I:

Camp	us Approvals			
	1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form)			
	1b. Withdrawing a postsecondary educational program from moratorium			
	2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less			
	3. Establishing a B.A.S./A.A./A.S. area of study			
	4. Offering an existing postsecondary educational program via distance or online delivery			
OCHE	Approvals			
	5. Re-titling an existing postsecondary educational program			
	6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)			
	7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)			
	8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)			
	9. Revising a postsecondary educational program (Curriculum Proposal Form)			
<u>x</u>	10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years			
<u>B. Le</u>	evel II:			
	1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form			
	2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)			
	3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11			
	4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)			
	5. Re-titling an academic, administrative, or research unit			

ACADEMIC PROPOSAL REQUEST FORM

SUBMISSION MONTH/YEAR: November 2021

ITEM 2013-LI1121

ITEM TITLE Request for authorization to establish a temporary CAS in Carpentry				
Institution:	Gallatin College Montana State University	CIP Code: 46.0201		
Program/Center/Institute Title:	Temporary Certificate of Applied Science in Carp	pentry		
Includes (please specify below):	Face-to-face Offering: X Online Offering:	Blended Offering:		
Options:				
Proposal Summary [360 words maximum]				
students the theoretical arclassroom instruction and	nd technical applications of carpentry within the co	amental and advanced skills in carpentry, including		
Why: For the fourth year in a row, Bozeman, Montana has been rated as the fastest growing micropolitan area in the nation. 2021 census data confirms a 33% increase in population in Gallatin County over the past decade, making it the second largest county in Montana. The COVID-19 pandemic and an influx of out-of-staters has further accelerated recent population growth. A limited housing market has led to a spike in housing prices, homelessness, and an insufficient workforce, making housing and infrastructure development even more critical. With these significant needs comes a critical demand for skilled carpenters.				
Carpentry has the highest job openings out of all construction trades occupations. Montana Department of Labor and Industry projects 755 annual carpenter/bench carpenter job openings in Montana through 2030; including 278 carpenter/bench carpenter positions solely within southwest Montana. Labor and Industry also projects an average wage of \$46,580 for southwest Montana carpenters, however, an aggregate of ten local carpenter wages in fall of 2021 showed that program graduates can expect to earn annual entry-level salaries around \$52,000, and \$70,720 after three to five years.				
The program will support regional and state-wide demand and provide students with strong wages and the ability to continue living and working in our area. Carpentry students will be able to increase their skills through hands-on instruction and will have direct contact with reputable industry advisors seeking highly skilled employees. Providing this program will positively impact students lives, local housing markets, and Gallatin County's economy.				
local economy and workfor	• • • • • • • • • • • • • • • • • • • •			
ATTACHMENTS None				

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

_A. Level I:
Campus Approvals
1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form)
1b. Withdrawing a postsecondary educational program from moratorium
2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
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OCHE Approvals
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8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9. Revising a postsecondary educational program (Curriculum Proposal Form)
X 10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. Level II:
1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form
2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11

ACADEMIC PROPOSAL REQUEST FORM

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4.	Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or
	Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
_	
5.	Re-titling an academic, administrative, or research unit
_	3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,

ACADEMIC PROPOSAL REQUEST FORM

November 2021

ITEM 1501-LI1121

ITEM TITLE Request for Temporary Authorization to offer an AAS in Welding Technology and update the curriculum of the existing CTS and CAS

Institution:	Highlands College		CIP Code: 48.0508	
Program/Center/Institute Title:	Welding Technology CTS, C	AS, AAS		
Includes (please specify below):	Face-to-face Offering: X	Online Offering:	Blended Offering:	
Options:				

Proposal Summary [360 words maximum]

The current Welding Technology Certificate of Applied Science uses the National Center for Construction Education & Research (NCCER) curriculum and is no longer aligned with the curricula, credits and best practices within the industry and other institutions in Montana. The current program curriculum is designed to be completed in two thirteen credit blocks which prevents transferability between institutions and jeopardizes student financial aid if any content is failed within a thirteen credit block.

The decision to change to the proposed Welding Technology curriculum is the result of feedback from the Highlands College Industrial Board as well as the Montana Contractor's Association. The proposed Welding Technology curriculum offers students multiple exit options in the form of a one-semester professional certificate in welding technology; a two-semester Certificate of Applied Science in Welding Technology; and a two-year Associate of Applied Science in Welding Technology that will also block-transfer into the Bachelor of Applied Science in Business with a Construction Management emphasis at Montana Tech. The curriculum is aligned with other programs in Montana which supports transferability, and allows students to remain eligible for financial aid should they struggle in a class. In addition, moving to the new curriculum and program structure provides Highlands College the ability to work with the Department of Labor and area industry partners such as Anaconda Foundry Fabrication Company (AFFCO) to place students in welding apprenticeships

A redesign and expansion of the Welding Technology program and curriculum provides students multiple exit points and preparation for immediate employability in accordance to BOR Policy 301.12 and upon completion of a one-semester 18 credit Certificate in Technical Studies with the ability to obtain Level I AWS SMAW Qualification; a two-semester 33 credit Certificate of Applied Science with the ability to obtain AWS SMAW, GMAW, FCAW Qualifications. The addition of the two-year 68 credit Associate of Applied Science degree transferrable to the Bachelor of Applied Science, Business with a Construction Management Option complies with BOR Policy 301.11.

Highlands College has worked with the faculty at both Gallatin College and Great Falls College to align the curriculum.

The addition of pipe welding to the second year of the program will require eliminating the current visiting instructor position and creating a full-time tenure track position that will teach the second year courses. The current Welding Technology program does not have program fees. Program fees will be assessed to cover the cost of materials and will be at an amount in alignment with other programs in the MUS.

ATTACHMENTS

None

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

x A. Level I:

Campus Approvals
1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form
1b. Withdrawing a postsecondary educational program from moratorium
2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
3. Establishing a B.A.S./A.A./A.S. area of study
4. Offering an existing postsecondary educational program via distance or online delivery ———
OCHE Approvals
5. Re-titling an existing postsecondary educational program
6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)

9. Revising a postsecondary educational program (Curriculum Proposal Form)

10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years

ACADEMIC ITEMS MEMORANDUM

DATE: January 5th, 2022

TO: Chief Academic Officers, Montana University System

FROM: Brock Tessman, Deputy Commissioner for Academic, Research, and Student Affairs

RE: December 2021 Academic Items

Contained within this memorandum are Level I and Level II proposals submitted by the institutions of the Montana University System in December 2021. These proposals include items for which approval authority has been designated by the Board of Regents to the individual institutions or the Commissioner of Higher Education. These Level I items are being sent to you for your review. If you have concerns about a particular proposal, you should share those concerns with your colleagues at that institution and try to come to some understanding. If you cannot resolve your concerns, raise them at the Chief Academic Officer's conference call on January 19th. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, January 21st. You will be notified of approved proposals by January 25th. The Board of Regents will be notified of the approved proposals at the March meeting of the Board.

LEVEL II ITEMS:

Montana State University Bozeman:

- Request for authorization to establish a Master of Engineering Civil Engineering Option
 Item #2010-LI221 | Curriculum Form | Fiscal Form | Request To Plan | Attachment #1
- Request for authorization to establish a Master of Engineering Environmental Engineering
 Option
 - Item #2011-LI221 | Curriculum Form | Fiscal Form | Request To Plan | Attachment #1
- Request for authorization to establish a Psychiatric Mental Health Nurse Practitioner Across the Lifespan Certificate

Item #2014-LI221 | Curriculum Form | Fiscal Form | Request To Plan

ACADEMIC PROPOSAL REQUEST FORM

SUBMISSION MONTH/YEAR: Dec, 2021

ITEM 2010-LI1221

Institution:	Montana State University		CIP Code: 14.0801	
rogram/Center/Institute				
Title:	Master of Engineering – Civ	vil Engineering Option		
Includes (please specify	Face-to-face	Online	Blended	
below):	Offering: X	Offering:	Offering:	
Options:				

Proposal Summary [360 words maximum]

What:

Create a Master of Engineering degree in Civil Engineering (M.Eng.-CE) as an option under the existing Master of Engineering (M.Eng.) degree program offered through the Norm Asbjornson College of Engineering. M.Eng. degree options are currently offered for Bioengineering, Chemical Engineering, Electrical Engineering and Mechanical Engineering. The M.Eng.-CE option would be a 30 credit, coursework only program with no thesis or professional paper required.

Why:

M. Eng.-CE students are those that seek to focus their expertise in a specific topic area or obtain an engineering graduate degree to compliment a non-engineering undergraduate degree (with appropriate levelling coursework). The M.Eng.-CE program will appeal to students who desire to continue their education immediately after finishing their undergraduate degree thus providing an opportunity for a "seamless" master's degree. The M.Eng. degree is also attractive to students in the workforce that wish to study part-time while working professionally. A thesis or professional paper requirement is often challenging for these students.

Resources:

The Department of Civil Engineering currently offers a Plan A (Thesis) and Plan B (Professional Paper) Master of Science in Civil Engineering. The Department has awarded 112 MS degrees in Civil Engineering between 2010-2018. The proposed M. Eng. – CE Option would augment the existing program providing students unable or uninterested in a thesis/professional project-based masters to pursue an advanced degree. The proposal is a change in degree format. Degree coursework content is currently offered with existing faculty and therefore no additional resources would be required.

ATTACHMENTS

Curriculum Proposal Form Fiscal Analysis Request to Plan Addendum

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

_A. Le	vel I:
Cam	pus Approvals
	1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form)
	1b. Withdrawing a postsecondary educational program from moratorium
	2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
	3. Establishing a B.A.S./A.A./A.S. area of study
	4. Offering an existing postsecondary educational program via distance or online delivery ———————————————————————————————————
ОСНІ	E Approvals
	5. Re-titling an existing postsecondary educational program
	6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
	 7. Consolidating existing postsecondary educational programs (<u>Curriculum Proposal Form</u>)
	8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
	Revising a postsecondary educational program (Curriculum Proposal Form)
	10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
 B. Le	evel II:
<u> </u>	Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form)
	2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
	3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11

ACADEMIC PROPOSAL REQUEST FORM

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4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or
Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
5. Re-titling an academic, administrative, or research unit

CURRICULUM PROPOSAL FORM

1. Overview of the request and resulting changes. Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. [100 words]

Create a Master of Engineering degree in Civil Engineering (M.Eng.-CE) as an option under the existing Masters of Engineering (M.Eng.) degree program offered through the Norm Asbjornson College of Engineering. M.Eng. degree options are currently offered for Bioengineering, Chemical Engineering, Electrical Engineering and Mechanical Engineering. The M.Eng.-CE option would be a 30 credit, course-work only program with no thesis or professional paper required. The Department of Civil Engineering currently offers a Plan A (Thesis) and Plan B (Professional Paper) Master of Science in Civil Engineering (MSCE). The proposed M. Eng. – CE option would provide an option for students not able to or interested in pursuing a thesis or professional paper graduate degree. The M.Eng-CE thus augments the existing program and provides another option for students seeking to focus their expertise in a specific topic area.

2. Relation to institutional strategic goals. Describe the nature and purpose of the new program in the context of the institution's mission and core themes. [200 words]

The 2019 Montana State University Strategic Plan and The Norm Asbjornson College of Engineering (NACOE) strategic plan call for expanded high-quality graduate education. Creation of the M.Eng.-CE option is part of the graduate program review specified in these strategic plans to look for efficiencies and opportunities to increase graduate education quality and enrollment. The proposed program will:

- move toward standardization of degrees within the NACOE
- make a seamless master's program possible for students
- Allow students to pursue a graduate degree while employed.

The M.Eng.-CE option will increase graduate enrollment in the Department and the NACOE.

3. Process leading to submission. Briefly detail the planning, development, and approval process of the program at the institution. [100 words]

The Department of Civil Engineering faculty have conducted a review of the current Master of Science in Civil Engineering program over the last year. Faculty evaluated options to grow enrollment and improve scholarly productivity. The Department's graduate program were also reviewed by the NACOE Dean. The proposed creation of a M.Eng.-CE option resulted from this process. The M.Eng.-CE will provide an opportunity for students not able to or interested in pursuing a thesis or professional paper to seek a graduate degree. Increased enrollment is anticipated.

- **4. Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.
 - a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the prog	gram 30
Decredits in required courses offered by other departments and um	6

CURRICULUM PROPOSAL FORM

Credits in institutional general education curriculum	
Credits of free electives	27
Total credits required to complete the program	30

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

The learning outcomes for the M.Eng.-CE degree are:

- Apply advanced mathematics or statistics.
- Understanding of supporting science and business principals.
- Demonstrate technical expertise in a one civil engineering discipline.
- **5. Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. [250 words]

The Graduate School conducted a market analysis of graduate programs poised for growth at MSU. Civil Engineering was identified as one of the top programs with a high and/or growing demand and few regional competitors (EAB Market Insights Brief). The proposed M.Eng. -CE Option will provide an opportunity for recent graduates and working professionals to pursue a course-based degree. The M.Eng.-CE option can also be developed into a seamless master's degree.

6. Similar programs. Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title		
Montana State University	Master of Science	Civil Engineering		
Montana Tech	Master of Science	Civil Engineering		

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. [200 words]

The proposed M.Eng. –CE option creates a course work only master's degree within an existing degree program in the NACOE. The option augments existing degree programs and streamlines and clarifies existing degree programs with the NACOE.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. [200 words]

The proposal does not create a new degree (only an option within an existing degree) that competes with other institutions so no coordination with other institutions was necessary.

7. Implementation of the program. When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. [100 words]

CURRICULUM PROPOSAL FORM

The M.Eng.-CE option would be implemented in Fall 2021. Phased implementation is not necessary because the degree option augments an existing degree which is currently being offered.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

	Fall Headc	ount Enroll	ment				Graduates		
AY_21- 22_	AY_22- 23	AY_23- 24	AY_24- 25	AY25- 26_	AY_21- 22_	AY_22- 23	AY_23- 24	AY_24- 25	AY25- 26_
9	10	12	15	20	4	6	8	9	11

b. Describe the methodology and sources for determining the enrollment and graduation projections above. [200 words]

Future enrollments have been projected from past enrollment trends and on expressed interest in the degree from potential students and our advisory board. Over the past 8 years, the Department has enrolled between 30 and 35 MS- CE students and awarded an average of 12 MS degrees per year. Most MS-CE students are supported through research or teaching assistantships. However, 5-10 students per year have been self-funded.

The M.Eng.-CE option will be more attractive to students who are not interested or cannot pursue and thesis or professional paper-based degree. Increased graduate enrollment of, primarily, self-funded graduate students are anticipated as a result of creating this option. The enrollment headcount and graduate projections provided in the table are additional students (above the Department's historical enrollment trends for MS students) anticipated in the Department as a result of this degree option.

c. What is the initial capacity for the program?

Existing courses will be used for the M.Eng.-CE option. Capacity of the M.Eng.-CE option is based on course capacity which is estimated at 80 total master's students.

- **8. Program assessment.** How will success of the program be determined? What action would result if this definition of success is not met? [150 words]
 - a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? [150 words]

Student performance in required coursework will be the primary assessment mechanism to evaluate technical competence. Each class will have multiple assessments each semester (tests, projects, papers). Time to degree and retention rate will also be evaluated for each class cohort.

b. What direct and indirect measures will be used to assess student learning? [100 words]

Job placement results and an annual review of the program by the Department's external advisory board.

CURRICULUM PROPOSAL FORM

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? [100 words]

An annual review will be conducted of each course in the graduate program by the Department Head, the Program Coordinator, and the faculty in each area of emphasis. Courses will be reviewed for content and consistency with program objectives.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. [100 words]

Graduate programs in the college are not accredited.

9. Physical resources.

a. Describe the <u>existing</u> facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? [200 words]

The current facilities within the NACOE and the Department of Civil Engineering are adequate for program delivery. The proposed M.Eng.-CE option will augment the existing MS-CE degree. No additional facilities will be needed for this coursework only degree.

b. List <u>needed</u> facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? [150 words]

10. Personnel resources.

a. Describe the <u>existing</u> instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? [200 words]

The current level of instructional, support, and administrative resources within the NACOE and the Department of Civil Engineering are adequate for current program delivery. The proposed M.Eng. will augment the existing MS-CE degree. No additional resources will be needed for this coursework only degree.

b. Identify <u>new</u> personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? [150 words]

The current level of personnel within the NACOE and the Department of Civil Engineering are adequate for current program delivery for the projected enrollments. The proposed creation of the M.Eng. will augment the existing MS-CE degree. No additional faculty or staff will be needed for this coursework only degree.

CURRICULUM PROPOSAL FORM

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? [100 words]

Yes

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? [150 words]

Yes

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. [100 words]

The current level of instructional, support, and administrative resources and existing facilities within the NACOE and the Department of Civil Engineering are adequate for current program delivery. Because the proposed M.Eng. will augment the existing MS-ENVE degree, no additional resources will be required to deliver the program. Revenue will be generated from increased enrollment of tuition paying graduate student as a result of implementing this program.

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues	\$55,105	\$62,931	\$77,631
Expenses	\$2,500	\$2,500	\$2,500
Net Income/Deficit (revenues-expenses)	\$52,605	\$60,431	\$75,131

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? [200 words]

Because the proposed M.Eng. will augment the existing MS-CE degree, the only additional resources required are minimal (\$2,500/yr.) expenses for outreach and marketing. Faculty, staff and facilities are currently in place to deliver the MS-CE program. The proposed M.Eng.-CE option will attract additional students with no associated increase in costs resulting in net income from additional, tuition paying masters students who would otherwise not attend MSU. Net revenues in the budget projection assumes a net increase of additional in-state and out of state tuition (50/50 split) paying M.Eng.-CE students.

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? [150 words]

No reallocation

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

CURRICULUM PROPOSAL FORM

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? [150 words]

No one time funding will be used.

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? [150 words]

No grants are proposed to fund the program

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

No new student fees are proposed.

14. Complete the fiscal analysis form.

Attached

Signature/Date	— DocuSigned by:	
College or School Dean:	Brett Gunrick 4D3351D90E3C4F2	12/14/2021 4:01 PM MS
Chief Academic Officer:	Pocusigned by: Robert Mokwa 212A28411AC04BD	12/14/2021 4:01 PM MS
Chief Executive Officer:	DocuSigned by: 7D6A4CE96C3F415	12/14/2021 4:01 PM MS
Flagship Provost*:	Pocusigned by: Robert Mokwa 212A28411AC04BD	12/14/2021 4:01 PM MS
Flagship President*:	DocuSigned by: 7D6A4CE96C3F415	12/14/2021 4:01 PM MS

^{*}Not applicable to the Community Colleges.

CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

- 30 credit-hours total.
- Up to 9 credits of 400 level courses may be used to satisfy degree requirements.
- Courses at the 300 level may be required to fulfil prerequisites, but do not contribute to the 30 credit-hours required.
- Courses with grades below "C" cannot be used to satisfy graduation requirements.
- A minimum cumulative GPA of 3.0 is required to remain in, and graduate from, the M. Eng. program.
- A minimum of 3 credit-hours registration is required during the term of graduation.
- A course of study must include
 - Seminar (ECIV 594)
 - At least 3 credits of advanced math, statistics, or numerical methods (EGEN 505, EGEN 506, EM
 525, EIND 455 or approved alternate)
 - At least 3 credits of an advanced business, management, law or policy (ECIV 507, EINV 434, EIND 425 or approved alternate).
- The remaining credits will be customized for each student based on desired professional outcomes and will include engineering an and advanced science courses.
- A maximum of 3 credit-hours of Independent Study courses (ECIV 589) are allowed. This option allows students to pursue a specialized area of study under the supervision of a single professor. An independent study course is not required to complete the M.Eng. degree.
- Programs-of-study must be submitted to, and approved by, the CE Department Head and the Associate
 Dean of Research, Economic Development and Graduate Education during the first semester of
 enrollment in the program.

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:

AWARD LEVEL:

PROGRAM NAME:

M.Eng. Civil Engineering

PROGRAM CODE:

		FY2022	FY2023	FY2024	FY2025	FY2026
ENROLLMENT P	ROJECTIONS					
Headcount		Г		T		
annual unduplicated headcount of s minor within the program	tudents with declared major or	9	10	12	15	20
Credit Hours						
annual avg. credits hours earned per curriculum	r student in program related	15	15	15	15	15
Student FTE						
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24		5.625	6.25	7.5	9.375	12.5
Completions		L				
Annual number of program complet	ers	4	6	8	9	11
REVEN	IUE					
Tuition Revenue (net of waivers)		\$55,105	\$62,931	\$77,631	\$99,774	\$136,807
Institutional Support						
Other Outside Funds (grants, gifts, e	tc.)					
Program Tuition/Fees						
Total Rev		\$55,105	\$62,931	\$77,631	\$99,774	
Total Revenue pe	er Student FTE	\$9,796	\$10,069	\$10,351	\$10,643	\$10,945
EXPENDI	TURFS					
<u> </u>						
Tenure Track Faculty	FTE	0.0	0.0	0.0	0.0	0.0
Tenure Track Faculty	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Non-tenure Track Faculty	FTE	0.0	0.0	0.0	0.0	0.0
*Includes Adjunct Instructors	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Graduate Teaching Assistants	FTE	0.0	0.0	0.0	0.0	0.0
0	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Staff	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Total Faculty & Staff	FTE Salary + Benefits	0.0 \$0	0.0 \$0	0.0 \$0	0.0 \$0	0.0 \$0
	Saidily 1 Belleties	Ψ	ΨU	ΨO	φο	Ψ
Operations (supplies, travel, rent, et	c)	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
Start-up Expenses (OTO)			·	-	·	
Total Exp	enses	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
Canadana PTF as For the	/TT NITT\ Datia	#DN//01	#DIV/01	#DN//61	#D#//01	#DN//01
Student FTE to Facult		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Net Income/Deficit (Re	evenue - Expenses)	\$52,605	\$60,431	\$75,131	\$97,274	\$134,307

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.

DocuSigned by:

12/14/2021 | 4:29 PM MST

Campus Chief Financial Officer Signature

Chief Financial Officer Comments

The information above outlines the expenditures to run the program and indicates a need for institutional support. Institutional support has not yet been identified or approved. The college may need to reallocate funds internally to fund all, or a portion of, this program.

My signature above represents that the information on this form is accurate based on the knowledge I have on the date it is signed. My signature does not represent any form of approval for this program, including approval for institutional funding. --Terry Leist

ITEM 194-201/-- R0521

Meeting Date: May 2021

Item Name: Request authorization to establish a Master of Engineering-Civil Engineering Option

Program/Center/Institute Title: Master of Engineering – Civil Engineering Option

Planned 6-digit CIP

14.0801

Campus, School/Department:

MSU Bozeman, Norm Asbjornson College of **Engineering, Department of Civil Engineering**

Expected Final Submission Date:

Spring 21

Contact Name/Info:

Craig Woolard, Ph.D., P.E., Professor and Department Head, craig.woolard@montana.edu, 406-994-7402

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit http://mus.edu/che/arsa/academicproposals.asp.

1) Provide a description of the program/center/institute.

The Department of Civil Engineering is proposing a Master of Engineering degree in Civil Engineering (M.Eng.-CE) option under the existing Masters of Engineering (M.Eng.) degree program offered through the Norm Asbjornson College of Engineering. The M.Eng.-CE option would be a 30 credit, course-work only program option with no thesis or professional paper required. The option would allow students to achieve specialization in the disciplines offered within the Department of Civil Engineering (structures, geotechnical, water resources and transportation). The proposed option compliments the Department's Civil Engineering Bachelor's degree.

The Department currently offers a Plan A (Thesis) and Plan B (Professional Paper) Master of Science in Civil Engineering (MSCE). The M.Eng-CE augments these existing programs to provide another option for students seeking advanced education in a specific civil engineering subdiscipline.

The proposed M. Eng.-CE option allows students unable or uninterested in pursuing a thesis or professional paper graduate degree to pursue an advanced degree. The proposed M.Eng.-CE option will be attractive to recent graduates and working professionals who wish to pursue a course-based degree.

M.Eng. degree options are currently offered for Bioengineering, Chemical Engineering, Electrical Engineering and Mechanical Engineering.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources). The Bureau of Labor Statistics (BLS) 2019-2029 employment projections project a 2% growth in

employment for Civil Engineers nationwide (22,900 job openings) and a 12% growth in employment for

civil engineers in Montana (130 job openings). Average annual salaries for CE's are \$75,620 and \$87,060 in Montana and nationwide, respectively.

https://www.onetonline.org/link/localtrends/17-2051.00?st=MT&g=Go

Demand for CE's and related professional positions is driven largely by construction activities. The Montana Department of Labor (DOL) and Industry project the professional, scientific and technical services linked to the construction industry will be the fastest growing professional services sector over the next 10 years growing at an annual rate of 1.8%.

(http://lmi.mt.gov/Portals/193/Publications/LMI-Pubs/Labor%20Market%20Publications/Projections2018-28.pdf)

The BLS and DOL job growth forecasts are supported by the graduate programs market analysis conducted by the Graduate School. Civil Engineering was identified as one of the top programs at MSU with a high and/or growing demand and few regional competitors. A study by the academic research firm, EAB, projected an 8% growth (118 job openings) in the 2017-2020 regional job posting. (Graduate Portfolio Health Check, Market Insights Brief, EAB Global Inc., May 2020)

Employment data support the demand civil engineers with graduate degrees. The most recent (2019) MSU Career Destination Survey showed a 100% placement of graduates from the MSCE responding to the survey, up from 83% in 2018 and 57% in 2017.

(http://www.montana.edu/aycss/careers/planning/career-destinations.html)

Finally, the graduate degree is becoming more common in the profession. The American Society of Civil Engineers (ASCE) states that the "most effective means of fulfilling the formal educational requirements of the civil engineering body of knowledge is by completing a baccalaureate degree in civil engineering from an ABET-accredited program and a master's degree in civil engineering or a civil engineering specialty area." (https://www.asce.org/issues-and-advocacy/public-policy/policy-statement-465---the-civil-engineering/).

3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.

Because the proposed M.Eng.-CE will augment the existing MSCE degree, no additional resources will be required. The faculty, staff and facilities are currently in place to deliver the MSCE program. The proposed M.Eng.-CE option will attract additional students with no associated increase in costs resulting in net income from additional graduate students who would otherwise not attend MSU.

 Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).

The proposal adds an option to an existing degree program and augments the Department's existing MSCE program. All of courses for the degree have been previously approved after review by other campuses. New courses would be approved through the existing curriculum approval processes.

M.Eng.-CE students could apply courses from the upper division and graduate courses offered at Montana Tech to the program through existing articulation agreements.

5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.

MSU's Strategic plan GOAL 1.2 is: "Expand high-quality graduate education Montana State University will enroll and graduate more degree-seeking students at the graduate level and enhance the quality of graduate degree programs." Having an additional, course-only option will increase the number of students obtaining a master's degree.

The Norm Asbjornson College of Engineering (NACOE) strategic plan also call for expanded high-quality graduate education. Creation of the M.Eng.-CE option is part of the NACOE graduate program review look for efficiencies and opportunities to increase graduate education quality and enrollment. The proposed program will move toward standardization of degrees from each department within the NACOE and allow a broader group of students to pursue and advanced degree.

Signature/Date	
Chief Academic Officer:	Robert Mokwa
Chief Research Officer*:	
Chief Executive Officer:	DocuSigned by: THO THEACE DECAF415
Flagship Provost**:	Robert Mokwa DEDD74A82C3A418
Flagship President**:	Occusioned by: WORKER OCCUPATS
*Center/Institute Proposa	al only
**Not applicable to the Co	ommunity Colleges.

ITEM 194-2016-R0521

Request to Plan a Master of Engineering-Civil Engineering Option - Montana State University-Bozeman

		ОСНЕ	ANALYSIS	THE RESERVE
Labor market outlook	According to O*Net, manufacturing engineering jobs are expected to grow slower than average in the next ten years. On average, workers in Montana in the field earn \$76,520 per year, compared to the national average of \$88,570. About 43% of jobs nationally in this field require a Bachelor's degree and about 26% require a Master's degree.			
Related programs / centers / institutes Montana Tech offers an option in Civil Engineering within their Master of Engineering program.				
Budget Impact	x	Only incidental costs	MEDIUM	HIGH
oudget impact	All courses needed already exist.			
CAO discussion and follow-up	No concerns were raised during the CAO call.			
ARSA/BOR comment and direction for Level II proposal				

General admission requirements for the program are a Bachelor's degree (official transcripts, GPA > 3.0 preferred), three letters of recommendation, career goals statement. A faculty committee reviews and scores applicants and makes a recommendation to the Department Head for admission.

For those students pursuing the M.Eng.-CE degree without an accredited undergraduate engineering degree, leveling course will be required. Leveling courses are intended to provide students without an accredited bachelor's degree in civil engineering, or a closely related field, with sufficient background in civil engineering to be eligible for the Fundamentals of Engineering exam and ultimately professional registration. Leveling courses are also pre-requisites for graduate level courses. Students with a BS degree in Civil Engineering (or closely related field) would typically be exempt from taking leveling courses. Students with a different accredited engineering bachelor's degree typically have fewer leveling course requirements than students without an engineering background. Leveling courses will typically need to have been completed in the applicant's undergraduate degree or taken at MSU as part of the Master's program of study. A program plan that includes any required leveling courses will be developed in consultation with a graduate advisor after a detailed review of the student's academic transcripts. Typical levelling courses for a non-engineering M.Eng.-CE student would include:

Required Leveling Courses (or equivalent)

Calculus I	M 171Q
Calculus II	M 172Q
Multivariable Calculus	M 273Q
Intro to Differential Equations	M 274
Statistics	EGEN 350
College Chemistry I	CHMY 141
General and Modern Physics I	PHSX 220
Statics	EGEN 201
Mechanics of Materials	EGEN 205
CE Fluid Mechanics	EGEN 337
And Any 5 of the Following courses	
Structures I	ECIV 312
Structures II	ECIV 315
Water Resources Engineering (Hydraulics and Hydrology)	ECIV 333
Principles of Environmental Engineering	EENV 340
Geotechnical Engineering	ECIV 320
Transportation Engineering	ECIV 350
Construction Practice	ECIV 308

Each student will be assigned a tenure track faculty as graduate advisor. M.Eng. -CE students will not have a graduate committee.

Each student will develop, in consultation with an assigned graduate advisor, a unique program of study designed to achieve the student's professional goals. As an example, a program of study for a M.Eng.-CE student with an interest in structural engineering would contain the following courses.

- 1. ECIV 594 Seminar (1 credit)
- 2. EM 415 Advanced Mechanics of Solids (3 credits)
- 3. EM 560 Finite Element Analysis (3 credits)
- 4. EM 518 Theory of Plates and Shells (2 credits)
- 5. ECIV 507 Law of the Construction Industry (3 credits)
- 6. EIND 434 Project Management for Engineers (3 credits)
- 7. ECIV 512 Structural Dynamics (3 credits)
- 8. ECIV 513 Behavior of Concrete Structures (3 credits)
- 9. ECIV 514 Behavior of Steel Structures (3 credits)
- 10. ECIV 519 Bridge and Prestressed Concrete Design (3 credits)
- 11. ECIV 524 Advanced Soil Mechanics

ACADEMIC PROPOSAL REQUEST FORM

SUBMISSION MONTH/YEAR, Dec, 2021

ITEM 2011-LI1221

Curriculum Proposal form

Fiscal Analysis

ITEM TITLE Request authorization to establish a Master of Engineering – Environmental Engineering Option
Institution: Montana State University CIP Code: 14.1401
Program/Center/Institute Title: Master of Engineering – Environmental Engineering Option
Includes (please specify below): Face-to-face Offering: Online Offering: Blended Offering: Options:
Proposal Summary [360 words maximum]
What:
Create a Master of Engineering degree in Environmental Engineering (M.EngENVE) as an option under the existing Masters of Engineering (M.Eng.) degree program offered through the Norm Asbjornson College of Engineering. M.Eng. degree options are currently offered for Bioengineering, Chemical Engineering, Electrical Engineering and Mechanical Engineering. The M.EngENVE option would be a 30 credit, course-work only program with no thesis or professional paper required.
Why:
M. EngENVE students are those that seek to focus their expertise in a specific topic area or obtain an engineering graduate degree to compliment a non-engineering undergraduate degree (with appropriate levelling coursework). The M.EngENVE program will appeal to students who desire to continue their education immediately after finishing their undergraduate degree thus providing an opportunity for a "seamless" master's degree. The M.EngENVE degree is also attractive to students pursuing a graduate degree while employed. A thesis or professional paper requirement is often challenging for these students.
Resources:
The Department of Civil Engineering currently offers a Plan A (Thesis) and Plan B (Professional Paper) Master of Science (MS) in Environmental Engineering. The Department has awarded 25 MS Environmental Engineering between 2010-2018). The proposed M. Eng. – ENVE Option would augment the existing program providing students unable or uninterested in a thesis/professional project-based masters to pursue an advanced degree. The proposal is a change in degree format. Degree coursework content is currently offered with existing faculty and therefore no additional resources would be required.
ATTACHMENTS

December 2021 Academic Item Memorandum 19 of 52

ACADEMIC PROPOSAL REQUEST FORM

Request to Plan Addendum

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

	Camp	us Approvals
		1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form)
		1b. Withdrawing a postsecondary educational program from moratorium
		2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
		3. Establishing a B.A.S./A.A./A.S. area of study
		4. Offering an existing postsecondary educational program via distance or online delivery
	ОСНЕ	Approvals
		5. Re-titling an existing postsecondary educational program
		6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
		7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
		8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
		9. Revising a postsecondary educational program (Curriculum Proposal Form)
		10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
ζ	B. Le	evel II:
	X	1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form)

ACADEMIC PROPOSAL REQUEST FORM

2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11
4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
5. Re-titling an academic, administrative, or research unit

CURRICULUM PROPOSAL FORM

1. Overview of the request and resulting changes. Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. [100 words]

Create a Master of Engineering degree in Environmental Engineering (M.Eng.-ENVE) as an option under the existing Master of Engineering (M.Eng.) degree program offered through the Norm Asbjornson College of Engineering. M.Eng. degree options are currently offered for Bioengineering, Chemical Engineering, Electrical Engineering and Mechanical Engineering. The M.Eng.-ENVE option would be a 30 credit, coursework only program with no thesis or professional paper required. The Department of Civil Engineering currently offers a Plan A (Thesis) and Plan B (Professional Paper) Master of Science in Environmental Engineering (MSENVE). The Department of Chemical and Biological Engineering also offers a MSENVE degree. The proposed M. Eng – ENVE option would provide an option for students not able to or interested in pursuing a thesis or professional paper graduate degree. The M.Eng-ENVE thus augments the existing program and provides another option for students seeking to focus their expertise in a specific topic area.

2. Relation to institutional strategic goals. Describe the nature and purpose of the new program in the context of the institution's mission and core themes. [200 words]

The 2019 Montana State University Strategic Plan and the Norm Asbjornson College of Engineering (NACOE) strategic plan goals call for expanded high-quality graduate education. Creation of the M.Eng.-ENVE option is part of the graduate program review specified in these strategic plans to look for efficiencies and opportunities to increase graduate education quality and enrollment. The proposed program will:

- move toward standardization of degrees within the NACOE
- make a seamless master's program possible for students
- Allow students to pursue a graduate degree while employed.

The M.Eng.-ENVE option will increase graduate enrollment in the Department and the NACOE.

3. Process leading to submission. Briefly detail the planning, development, and approval process of the program at the institution. [100 words]

The Department of Civil Engineering faculty have conducted a review of the current Master of Science in Environmental Engineering program over the last year. Faculty evaluated options to grow enrollment and improve scholarly productivity. The Department's graduate program were also reviewed by the NACOE Dean. The proposed creation of a M.Eng.-ENVE option resulted from this process. The M.Eng.-ENVE will provide an opportunity for students not able to or interested in pursuing a thesis or professional paper to seek a graduate degree. Increased enrollment is anticipated. In addition, the M.Eng.-ENVE will allow faculty to focus their research efforts on students completing a research thesis.

4.	Program description. Please include a complete listing of the proposed new curriculum in Appendix A of this
	document.

 a. List the program requirements using the following table. 			
		Credits	

CURRICULUM PROPOSAL FORM

Credits in required courses offered by the department offering the program	30
Credits in required courses offered by other departments	6
Credits in institutional general education curriculum	
Credits of free electives	27
Total credits required to complete the program	30

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

The learning outcomes for the M.Eng.-CE degree are:

- Apply advanced mathematics or statistics.
- Understanding of supporting science or business principals
- Demonstrate technical expertise in a one civil engineering discipline
- **5. Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. [250 words]

The Graduate School conducted a market analysis of graduate programs poised for growth at MSU. Civil Engineering and Land Resources and Environmental Science were identified as two of the top programs with a high and/or growing demand an few regional competitors (EAB Market Insights Brief). The proposed M.Eng.-ENVE option will provide an opportunity for working professionals to pursue a course-based degree that includes elements of both of these high potential areas the M.Eng.-ENVE option can also be developed into a seamless master's degree.

6. Similar programs. Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title
Montana State University	Master of Science	Environmental Engineering (offered through the Civil Engineering Department)
Montana State University	Master of Science	Environmental Engineering (offered through the Chemical and Biological Engineering Department)
Montana Tech	Master of Science	Environmental Engineering

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. [200 words]

CURRICULUM PROPOSAL FORM

The proposed M.Eng. –ENVE option creates a course work only master's degree within an existing degree program in the NACOE. The option augments existing degree programs and streamlines and clarifies existing degree programs with the NACOE.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. [200 words]

The proposal does not create a new degree (only an option within an existing degree) that competes with other institutions so no coordination with other institutions was necessary.

7. Implementation of the program. When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. [100 words]

The M.Eng.-ENVE option would be implemented in Fall 2021. Phased implementation is not necessary because the degree option augments existing degrees which are currently being offered.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

Fall Headcount Enrollment				Graduates					
AY_21- 22_	AY_22- 23	AY_23- 24	AY_24- 25	AY25- 26_	AY_21- 22_	AY_22- 23	AY_23- 24	AY_24- 25	AY25- 26_
3	5	8	10	12	1	3	5	7	9

b. Describe the methodology and sources for determining the enrollment and graduation projections above. [200 words]

Future enrollments have been projected from past enrollment trends and on expressed interest in the degree from potential students and our advisory board. Over the past 8 years, the Department has awarded an average of 4 MS-ENVE degrees per year. Most MS -ENVE students are supported through research or teaching assistantships. However, 1-3 students per year have been self-funded.

The M.Eng.-ENVE option will be more attractive to students who are not interested or cannot pursue and thesis or professional paper-based degree. Increased graduate enrollment of, primarily, self-funded graduate students are anticipated as a result of creating this option. The enrollment headcount and graduate projections provided in the table are additional students (above the Department's historical enrollment trends for MS students) anticipated in the Department as a result of this degree option.

c. What is the initial capacity for the program?

Existing courses will be used for the M.Eng.-ENVE option. Capacity of the M.Eng.-ENVE option is based on course capacity which is estimated at 80 total master's students.

8. Program assessment. How will success of the program be determined? What action would result if this definition of success is not met? [150 words]

CURRICULUM PROPOSAL FORM

a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? [150 words]

Student performance in required coursework will be the primary assessment mechanism to evaluate technical competence. Each class will have multiple assessments each semester (tests, projects, papers). Time to degree and retention rate will also be evaluated for each class cohort.

b. What direct and indirect measures will be used to assess student learning? [100 words]

Job placement results and an annual review of the program by the Department's external advisory board.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? [100 words]

An annual review will be conducted of each course in the graduate program by the Department Head, the Program Coordinator, and the faculty in each area of emphasis. Courses will be reviewed for content and consistency with program objectives.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. [100 words]

Graduate programs in the college are not accredited.

9. Physical resources.

a. Describe the <u>existing</u> facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? [200 words]

The current facilities within the NACOE and the Department of Civil Engineering are adequate for program delivery. The proposed M.Eng.-ENVE option will augment the existing MS-EVNE degree. No additional facilities will be needed for this coursework only degree.

b. List <u>needed</u> facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? [150 words]

10. Personnel resources.

a. Describe the <u>existing</u> instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? [200 words]

CURRICULUM PROPOSAL FORM

The current level of instructional, support, and administrative resources within the NACOE and the Department of Civil Engineering are adequate for current program delivery. The proposed M.Eng. -ENVE will augment the existing MS-ENVE degree. No additional resources will be needed for this coursework only degree.

b. Identify <u>new</u> personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? [150 words]

The current level of personnel within the NACOE and the Department of Civil Engineering are adequate for current program delivery for the projected enrollments. The proposed creation of the M.Eng. will augment the existing MS-ENVE degree. No additional faculty or staff will be needed for this coursework only degree.

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? [100 words]

Yes

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? [150 words]

Yes

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. [100 words]

The current level of instructional, support, and administrative resources and existing facilities within the NACOE and the Department of Civil Engineering are adequate for current program delivery. Because the proposed M.Eng. will augment the existing MS-ENVE degree, no additional resources will be required to deliver the program. Revenue will be generated from increased enrollment of tuition paying graduate student as a result of implementing this program.

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues	\$18,368	\$31,465	\$51,754
Expenses	\$2,500	\$2,500	\$2,500
Net Income/Deficit (revenues-expenses)	\$15,868	\$28,965	\$49,254

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? [200 words]

CURRICULUM PROPOSAL FORM

Because the proposed M.Eng. will augment the existing MS-ENVE degree, the only additional resources required are minimal (\$2,500/yr.) expenses for outreach and marketing. Faculty, staff, and facilities are currently in place to deliver the MS-ENVE program. The proposed M.Eng.-ENVE option will attract additional students with no associated increase in costs resulting in net income from additional, tuition paying masters students who would otherwise not attend MSU. Net revenues in the budget projection assumes a net increase of additional in-state and out of state tuition (50/50 split) paying M.Eng.-ENVE students.

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? [150 words]

No reallocation

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

No increase in base funding is requested.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? [150 words]

No one time funding will be used.

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? [150 words]

No grants are proposed to fund the program

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

No new student fees are proposed.

14. Complete the fiscal analysis form. Attached

Signature/Date

College or School Dean:

— Docusigned by:

Brett Yunnink

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12/14/2021 | 4:00 PM MST

Chief Academic Officer:



12/14/2021 | 4:00 PM MST

CURRICULUM PROPOSAL FORM

Chief Executive Officer:

DocuSigned by:

12/14/2021 | 4:00 PM MST

Flagship Provost*:

Docusigned by:

Kobert Mokwa

212A28411AC04BD...

12/14/2021 | 4:00 PM MST

DocuSigned by:

Flagship President*:



12/14/2021 | 4:00 PM MST

^{*}Not applicable to the Community Colleges.

CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

- 30 credit-hours total.
- Up to 9 credits of 400 level courses may be used to satisfy degree requirements.
- Courses at the 300 level may be required to fulfil prerequisites, but do not contribute to the 30 credit-hours required.
- Courses with grades below "C" cannot be used to satisfy graduation requirements.
- A minimum cumulative GPA of 3.0 is required to remain in, and graduate from, the M. Eng. program.
- A minimum of 3 credit-hours registration is required during the term of graduation.
- A course of study must include
 - Seminar (ECIV 594)
 - At least 3 credits of advanced math, statistics, or numerical methods (EGEN 505, EGEN 506, EM
 525, EIND 455 or approved alternate)
 - At least 3 credits of an advanced business, management, law, or policy (ECIV 507, EINV 434, EIND 425 or approved alternate).
- The remaining credits will be customized for each student based on desired professional outcomes and will include engineering and advanced science courses.
- A maximum of 3 credit-hours of Independent Study courses (ECIV 589) are allowed. This option allows students to pursue a specialized area of study under the supervision of a single professor. An independent study course is not required to complete the M.Eng. degree
- Programs-of-study must be submitted to, and approved by, the CE Department Head and the Associate Dean of Research, Economic Development and Graduate Education during the first semester of enrollment in the program.

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS: Bozeman
AWARD LEVEL: Grad

PROGRAM NAME: M.Eng. In Environmental Engineering

PROGRAM CODE:

		FY2022	FY2023	FY2024	FY2025	FY2026
ENROLLMENT PR	OJECTIONS					
Headcount						
annual unduplicated headcount of some or minor within the program	students with declared major	3	5	8	10	12
or minor within the program						
Credit Hours			T			
annual avg. credits hours earned pe	r student in program related	15	15	15	15	15
curriculum		12	12	15	15	15
Student FTE						
Undergrad: (Headcount x CH)/30						
Graduate: (Headcount x CH)/24		1.875	3.125	5	6.25	7.5
Commissions						
Completions						
Annual number of program complete	1	3	5	7	9	
			•			
REVENU	JE					
Tuition Revenue (net of waivers)		\$18,368	\$31,465	\$51,754	\$66,516	\$82,084
Institutional Support						
Other Outside Funds (grants, gifts, e	etc.)					
Program Tuition/Fees Total Reve		¢10.200	¢21 4CF	¢51.754	ĆCC F1C	¢92.094
Total Revenue per		\$18,368 \$9,796	\$31,465 \$10,069	\$51,754 \$10,351	\$66,516 \$10,643	\$82,084 \$10,945
Total Nevenue per	Student 112	43,730	710,005	710,331	710,043	710,343
EXPENDIT	JRES					
	FTE	0.0	0.0	0.0	0.0	0.0
Tenure Track Faculty	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Non-tenure Track Faculty	FTE	0.0	0.0	0.0	0.0	0.0
*Includes Adjunct Instructors	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Graduate Teaching Assistants	FTE	0.0	0.0	0.0	0.0	0.0
Graduate reaching Assistants	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Staff	FTE	0.0	0.0	0.0	0.0	0.0
Starr	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Total Faculty & Staff	FTE	0.0	0.0	0.0	0.0	0.0
rotarracant, a starr	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Operations (supplies, travel, rent, et	rc)	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
Start-up Expenses (OTO)	72,550	+ =,000	÷2,330	÷2,550	÷2,550	
Total Expe	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	
Student FTE to Faculty	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
Net Income/Deficit (Rev	\$15,868	\$28,965	\$49,254	\$64,016	\$79,584	

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.

DocuSigned by: 12/14/2021 | 4:21 PM MST 5302B65C2C4746C...

Campus Chief Financial Officer Signature

Chief Financial Officer Comments

The information above outlines the expenditures to run the program and indicates a need for institutional support. Institutional support has not yet been identified or approved. The college may need to reallocate funds internally to fund all, or a portion of, this program.

My signature above represents that the information on this form is accurate based on the knowledge I have on the date it is signed. My signature does not represent any form of approval for this program, including approval for institutional funding. --Terry Leist

ITEM 194-2013-R0521 Meeting Date: May 21

Item Name: Request authorization to establish a Master of Engineering- Environmental Engineering Option

Master of Engineering – Environmental Program/Center/Institute Title:

Engineering Option

Planned 6-digit CIP code: 14.1401

MSU Bozeman, Norm Asbjornson College

Campus, School/Department: of Engineering, Department of Civil

Engineering

Expected Final Submission Date: Spring 21

Contact Name/Info:

Craig Woolard, Ph.D., P.E., Professor and Department Head,

craig.woolard@montana.edu, 406-994-7402

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit http://mus.edu/che/arsa/academicproposals.asp.

1) Provide a description of the program/center/institute.

The Department of Civil Engineering (the Department) is proposing a Master of Engineering degree in Environmental Engineering (M.Eng.-ENVE) option under the existing Masters of Engineering (M.Eng.) degree program offered through the Norm Asbjornson College of Engineering. The M.Eng.-ENVE option would be a 30 credit, course-work only program option with no thesis or professional paper required. The option would allow students to achieve specialization and advanced training in environmental engineering. The proposed option compliments the Department's Environmental Engineering Bachelor's degree.

The Department currently offers a Plan A (Thesis) and Plan B (Professional Paper) Master of Science in Environmental Engineering (MSENVE). The M.Eng-ENVE augments this existing program to provide another option for students seeking advanced education a specific civil engineering subdiscipline.

The proposed M. Eng. – ENVE option allows students unable or uninterested in pursuing a thesis or professional paper graduate degree to pursue an advanced degree. The proposed M.Eng. - ENVE option will be attractive to recent graduates and working professionals who wish to pursue a coursebased degree.

M.Eng. degree options are currently offered for Bioengineering, Chemical Engineering, Electrical Engineering and Mechanical Engineering.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).

The Bureau of Labor Statistics (BLS) 2019-2029 employment projections project a 3% growth in employment for Environmental Engineers nationwide (3,700 job openings) and a 13% growth in employment for environmental engineers in Montana (40 job openings). Average annual salaries for environmental engineers are \$82,900 and \$88,860 in Montana and nationwide, respectively.

(https://www.onetonline.org/link/localtrends/17-2051.00?st=MT&g=Go)

Demand for environmental engineers and related professional positions is driven largely by construction activities. The Montana Department of Labor (DOL) and Industry project the professional, scientific and technical services linked to the construction industry will be the fastest growing professional services sector over the next 10 years growing at an annual rate of 1.8%.

(http://lmi.mt.gov/Portals/193/Publications/LMI-Pubs/Labor%20Market%20Publications/Projections2018-28.pdf)

The BLS and DOL job growth forecasts are supported by the graduate programs market analysis conducted by the Graduate School. Civil Engineering (CE) and Land Resources and Environmental Sciences (LRES) were identified as two of the top programs at MSU with a high and/or growing demand and few regional competitors. Environmental Engineering combines critical elements of CE and LRES programs suggesting that the demand for graduates will be strong. A study by the academic research firm, EAB, projected an 8% growth (118 job openings) in 2017-2020 regional job postings for CE's and a 6.8% growth (134 job openings) for LRES positions. The forecast for environmental engineering job growth should be in this range. (Graduate Portfolio Health Check, Market Insights Brief, EAB Global Inc., May 2020)

Employment data support the demand civil engineers with graduate degrees. The most recent MSU Career Destination Survey with available data (2018) showed a 100% placement of graduates from the MSENV responding to the survey.

(http://www.montana.edu/aycss/careers/planning/career-destinations.html)

Finally, the graduate degree is becoming more common in the profession. The American Society of Civil Engineers (ASCE) states that the "most effective means of fulfilling the formal educational requirements of the civil engineering body of knowledge is by completing a baccalaureate degree in civil engineering from an Accreditation Board for Engineering and Technology, ABET-accredited program and a master's degree in civil engineering or a civil engineering specialty area." Environmental engineering is discipline within civil engineering that routinely requires an advanced degree for professional practice. (https://www.asce.org/issues-and-advocacy/public-policy/policy-statement-465---the-civil-engineering-body-of-knowledge-and-the-practice-of-civil-engineering/).

3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.

Because the proposed M.Eng.-ENV will augment the existing MSENVE degree, no additional resources will be required. The faculty, staff and facilities are currently in place to deliver the MSCE program. The proposed M.Eng.-ENVE option will attract additional students with no associated increase in costs resulting in net income from additional graduate students who would otherwise not attend MSU.

Montana University System REQUEST TO PLAN FORM

4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).

The proposal adds an option to an existing degree program and augments the Department's existing MSENVE program. All of courses for the degree have been previously approved after review by other campuses. New courses would be approved through the existing curriculum approval processes. M.Eng.-ENVE students could apply courses from the upper division and graduate courses offered at Montana Tech to the program through existing articulation agreements.

5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.

MSU's Strategic plan GOAL 1.2 is: "Expand high-quality graduate education Montana State University will enroll and graduate more degree-seeking students at the graduate level and enhance the quality of graduate degree programs." Having an additional, course only option will increase the number of students obtaining a master's degree.

The Norm Asbjornson College of Engineering (NACOE) strategic plan also call for expanded high-quality graduate education. Creation of the M.Eng.-ENVE option is part of the NACOE graduate program review look for efficiencies and opportunities to increase graduate education quality and enrollment. The proposed program will move toward standardization of degrees from each department within the NACOE and allow a broader group of students to pursue and advanced degree.

Signature/Date	
Chief Academic Officer:	Pocusigned by: Robert Mokwa 9EDD74A82C3A419
Chief Research Officer*:	
Chief Executive Officer:	DocuSigned by: 7D6A4CE96C3F415
Flagship Provost**:	Robert Mokwa
Flagship President**:	9EDD74A82C3A419 DocuSigned by: 706A4CE96C3F415
*Center/Institute Propos	al only
**Not applicable to the 0	Community Colleges.

M.Eng-ENVE Plan of Study Example.

General admission requirements for the program are a Bachelor's degree (official transcripts, GPA >3.0 preferred), three letters of recommendation, career goals statement. A faculty committee reviews and scores applicants and makes a recommendation to the Department Head for admission.

For those students pursuing the M.Eng-ENVE degree without a closely related accredited undergraduate engineering degree, leveling courses will be required. Leveling courses are intended to provide students without an accredited bachelor's degree in environmental engineering, or a closely related field such as civil or chemical engineering, with sufficient background in environmental engineering to be eligible for the Fundamentals of Engineering exam and ultimately professional registration. Leveling courses are also pre-requisites for graduate level courses. Students with a BS degree in Environmental Engineering (or closely related field) would typically be exempt from taking leveling courses. Students with a different accredited engineering bachelor's degree may have leveling course requirements, but typically fewer than students without an engineering background. Leveling courses will typically need to have been completed in the applicant's undergraduate degree or taken at MSU as part of the Master's program of study. A program plan that includes any required leveling courses will be developed in consultation with a graduate advisor after a detailed review of the student's academic transcripts. Typical levelling courses that a M.Eng-ENVE student would be expected to complete prior to their graduate program of study include:

Required Leveling Courses (or equivalent)

required Leveling Courses (or equivalent)	
Calculus I	M 171Q
Calculus II	M 172Q
Multivariable Calculus	M 273Q
Intro to Differential Equations	M 274
Statistics	EGEN 350
College Chemistry I	CHMY 141
College Chemistry II	CHMY 143
General and Modern Physics I	PHSX 220
Statics	EGEN 201
Mechanics of Materials	EGEN 205
CE Fluid Mechanics	EGEN 337
College-Level Biology	BIOB 160 or BIOB 170
Chemistry for Environmental Engineers	EENV 240
Water Resources Engineering (Hydraulics and Hydrology)	ECIV 333
Physical Chemical Treatment Processes	EENV 341
Environmental Laws and Regulations	EENV 387

Each student will be assigned a tenure track faculty as graduate advisor. M.Eng. -ENVE students will not have a graduate committee.

Each student will develop, in consultation with an assigned graduate advisor, a unique program of study designed to achieve the student's professional goals. As an example, a program of study for a M.Eng-ENVE student would contain the following courses.

- 1. ECIV 594 Seminar (1 credit)
- 2. EENV 534 Environmental Engineering Investigations (3 credits)
- 3. EENV 540 Water Chemistry for Environmental Engineers (3 credits)
- 4. EENV 561 Environmental Engineering Reactor Theory (3 credits)
- 5. EENV 562 Water Treatment Processes and Design (3 credits)
- 6. EENV 563 Wastewater Treatment Processes and Design (3 credits)
- 7. EIND 434 Project Management for Engineers (3 credits)
- 8. EENV 441 Natural Treatment Systems (3 credits)
- 9. EENV 529 Groundwater Supply and Remediation (3 credits)
- 10. ECIV 435 Closed Conduit Hydraulics (3 credits)
- 11. EGEN 505 Advanced Engineering Analysis (3 credits)

ACADEMIC PROPOSAL REQUEST FORM

SUBMISSION MONTH/YEAR, Dec, 2021

ITEM 2014-LI1221

Institution: Montana State University CIP Code: 51.3810 Program/Center/Institute Title: College of Nursing Includes (please specify below): Face-to-face Offering: ____ Online Offering: ____ Blended Offering: ____ Options:

Proposal Summary [360 words maximum]

What: The CON currently offers an option in the Doctor of Nursing Practice (DNP) program to specialize as a psychiatric mental health nurse practitioner (PMHNP). This proposed certificate program would allow advanced practice registered nurses (APRN) already nationally certified in another specialty area (e.g., family nurse practitioner, midwifery, pediatric, adult-geriatric, etc) to become nationally certified as a psych-mental health nurse practitioner by completing 29-35 credits and 500+ hours of direct patient clinical contact. All courses for the proposed PMHNP certificate program currently exist in the CON DNP program. No new courses will need to be developed and no additional sections of courses will be taught. Enrollment in this certificate program would be limited to open "seats" in the existing psych-mental health DNP didactic courses and available PMHNP clinical preceptors. No additional funds are required for this program. Increased efficiency of existing course offerings is anticipated by fully enrolling didactic courses and clinical sections.

Why: There is a critical shortage of psychiatric-mental health providers in the State of Montana and across the U.S. This program will allow current APRNs to shift or expand their focus to include care of persons experiencing acute or chronic mental illness. The MSU CON receives frequent inquiries of interest regarding a PMHNP certificate program. Estimated number of interested applicants annually is 5-10 with an estimated annual enrollment limited to 2-6 students based on available space in didactic and/or clinical courses.

Resources: All courses required for this certificate program are currently being offered in the CON's DNP program. No new courses will be created. Certificate students will be limited to the number who can be accommodated within existing sections and clinical sites. Hence, no new resources will be required to launch or sustain this program

ATTACHMENTS

Curriculum Proposal Form Fiscal Analysis Request to Plan

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

A. Level I:
Campus Approvals
1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form)
1b. Withdrawing a postsecondary educational program from moratorium
2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
3. Establishing a B.A.S./A.A./A.S. area of study
4. Offering an existing postsecondary educational program via distance or online delivery ———
OCHE Approvals
5. Re-titling an existing postsecondary educational program
6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form) ————————————————————————————————————
8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9. Revising a postsecondary educational program (Curriculum Proposal Form)
10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. Level II:
X 1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form
2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11

ACADEMIC PROPOSAL REQUEST FORM

4.	Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or
	Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
5.	Re-titling an academic, administrative, or research unit
-	,

CURRICULUM PROPOSAL FORM

1. Overview of the request and resulting changes. Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. [100 words]

The College of Nursing (CON) currently offers the Doctor of Nursing Practice (DNP) psychiatric mental health nurse practitioner (PMHNP) option. This proposed certificate program would allow advanced practice registered nurses (APRN) who are already nationally certified in another specialty area (e.g., family nurse practitioner) to become nationally certified as a PMHNP. All courses for the proposed certificate program currently exist in the DNP PMHNP option. Enrollment will be limited to open "seats" in existing courses and available clinical placements, thus allowing for increased efficiency. No additional funds are required for this program

2. Relation to institutional strategic goals. Describe the nature and purpose of the new program in the context of the institution's mission and core themes. [200 words]

The PMHNP Certificate program aligns with the AY 20-21 MSU Academic Priorities and Planning Statement and specifically addresses MSU Strategic Plan goals 1.2: Expand high quality graduate education, and 3.2: Grow mutually beneficial partnerships across Montana.

While 31 credits meet the minimum credit requirement for a MSU master's degree, this program is proposed as a professional certificate for a critical reason – to allow it to be nationally accredited. Education from an accredited program is strongly preferred in nursing to ensure eligibility for national certification as an APRN and state board licensure. The College of Nursing's nurse practitioner graduate programs have been continuously nationally accredited, including the Doctor of Nursing Practice program established in 2008 which is currently accredited by the Commission on Collegiate Nursing Education (CCNE). To meet national accreditation requirements for a master's degree, this program would be required to meet the American Association of Colleges of Nursing (AACN), The Essentials of Master's Education in Nursing, significantly more courses would be necessary. In contrast, CCNE accredited certificate programs allow nurses who hold a graduate degree as a nurse practitioner to efficiently obtain education in a new specialty area.

3. Process leading to submission. Briefly detail the planning, development, and approval process of the program at the institution. [100 words]

The College of Nursing's Graduate Academic Affairs Committee (GAAC) discussed the proposal of the PMHNP Certificate during AY 19-20 based on consumer demand. The proposal was approved by GAAC and the CON faculty on November 9, 2020. No new courses need to be developed this certificate program. The proposed certificate program will attract a new population of post-graduate nurse practitioner students.

- **4. Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.
 - a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	31

CURRICULUM PROPOSAL FORM

Credits in required courses offered by other departments	0
Credits in institutional general education curriculum	0
Credits of free electives	0
Total credits required to complete the program	31

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

Based on <u>AACN Essential 8</u>: Influence health outcomes by providing advanced independent comprehensive health care services including health promotion and counseling, health assessment and diagnosis, and disease prevention and management of health and illness of individuals and families throughout the lifespan the student will:

- 1. Conduct comprehensive and systematic psychiatric assessments in complex situations.
- 2. Apply selected therapeutic modalities for individuals, group psychotherapy, and the integration of multicultural skills for health promotion and management of mental health problems and psychiatric disorders.
- 3. Demonstrate appropriate evidence-based use of psychopharmacology concepts in the psychiatric care and management of individuals and families.
- 4. Demonstrate expertise, specialized knowledge, and expanded responsibility and accountability in the advanced psychiatric care and management of individuals and families.
- **5. Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. [250 words]

There is a critical shortage of psychiatric-mental health providers in the State of Montana and across the U.S. This program will allow current APRNs to shift or expand their focus to include care of persons experiencing acute or chronic mental illness. The MSU CON receives frequent inquiries of interest regarding a PMHNP certificate program from nurse practitioners practicing in Montana. Estimated number of interested applicants annually is 4-12 with an estimated annual enrollment limited to 2-6 students based on available space in didactic and/or clinical courses. The fiscal analysis for the program used the conservative estimate of 2 resident students annually.

6. Similar programs. Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title
N/A	N/A	N/A

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. [200 words]

CURRICULUM PROPOSAL FORM

Not applicable. Montana State University is the only MUS institution offering graduate nursing education. All courses included within this certificate program are only offered by MSU College of Nursing.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. [200 words]

Not Applicable. Montana State University is the only MUS institution offering graduate nursing education. No other similar programs are offered in Montana.

7. Implementation of the program. When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. [100 words]

The PMHNP Certificate program will require 5 semesters to complete with students taking between 2-8 credits each term. Earliest admission would be Fall 2021 with students graduating spring 2023. Cohorts will overlap during the final 2 semesters.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

	Fall He	adcount En	rollment				Graduates		
AY21- 22	AY 22- 23	AY 23- 24	AY 24- 25	AY 25- 26	AY 22- 23	AY 23- 24	AY 24- 25	AY 25- 26	AY 26- 27
2-6	4-12	4-12	4-12	4-12	2-6	2-6	2-6	2-6	2-6

b. Describe the methodology and sources for determining the enrollment and graduation projections above. [200 words]

Enrollment in this certificate program would be limited to open "seats" in the existing DNP PMHNP-option specialty didactic and clinical courses. We anticipate between 2 and 12 applicants annually.

c. What is the initial capacity for the program?

It is anticipated that up to 6 post graduate PMHNP Certificate students could be admitted annually as early as fall 2021.

8. Program assessment. How will success of the program be determined? What action would result if this definition of success is not met? [150 words]

Success will be determined by initial and ongoing program enrollment, successful completion of the certificate program, and pass rate of 90% or greater on the PMHNP national certification exam.

a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? [150 words]

The College of Nursing graduate program has been continuously nationally accredited since its inception in 1957. The DNP program is currently accredited by the Commission on Collegiate Nursing Education

CURRICULUM PROPOSAL FORM

(CCNE). The PMHNP Certificate will be incorporated into the ongoing CCNE accreditation assessment plan. Assessment of all CON graduate student learning outcomes are conducted annually.

b. What direct and indirect measures will be used to assess student learning? [100 words]

Direct:

- 1. Successful completion of all courses with Cumulative GPA of 3.0 or greater.
- 2. Direct clinical supervision of student performance by qualified clinical preceptors.
- 3. Onsite clinical evaluation by CON course clinical faculty supervisors.
- 4. Provision and documentation of PMHNP care as evidenced in Typhon (electronic clinical tracking platform) and electronic student portfolio.

Indirect:

- 1. ANCC Certification pass rate
- c. How will you ensure that the assessment findings will be used to ensure the quality of the program? [100 words]

Assessment finding will be reviewed by the CON Graduate Academic Affairs Committee per the college Master Evaluation Plan and overall CON Program Assessment Plan.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. [100 words]

The College of Nursing is nationally accredited by the Commission on Collegiate Nursing Education [CCNE] through June 2029. Accreditation of the certificate program will be sought per CCNE policies and procedures. CCNE will be noticed of the addition of the PMHNP Certificate program and assessment of this program will be included in the mid-cycle accreditation report in 2023.

9. Physical resources.

a. Describe the <u>existing</u> facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? [200 words]

The PMHNP Certificate will be offered via distance delivery consistent with other College of Nursing graduate programs. No new courses will need to be developed and no additional sections of courses will be taught. Enrollment in this certificate program will be limited to open "seats" in the existing DNP-PMHNP option specialty didactic courses and to availability of PMHNP clinical placements. No additional funds are required for this program. Increased efficiency of existing course offerings is anticipated by fully enrolling didactic courses and clinical sections.

b. List <u>needed</u> facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? [150 words]

N/A

CURRICULUM PROPOSAL FORM

10. Personnel resources.

a. Describe the <u>existing</u> instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? [200 words]

The College of Nursing DNP PMHNP option requires 1.58 instructional FTE to deliver the specialty courses specific to this option. One dedicated full-time graduate program assistant and one dedicated clinical placement coordinator are shared between the DNP-FNP and DNP-PMHNP options. Since enrollment in this certificate program would be limited to open "seats" in the existing DNP-PMHNP specialty courses, no additional personnel resources are proposed for the PMHNP Certificate program.

b. Identify <u>new</u> personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? [150 words]

N/A

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? [100 words]

Available library and information resources are sufficient.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? [150 words]

The College of Nursing has a dedicated graduate clinical placement coordinator who works directly with DNP students to anticipate, establish and support clinical placements both in Montana and out-of-state as needed. The addition of the PMHNP Certificate students will be accommodated within this process.

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. [100 words]

No additional funds are requested for this program.

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues	\$8,285	\$16,841	\$17,118
Expenses	\$1,500	\$3,000	\$3,000
Net Income/Deficit (revenues-expenses)	\$6,785	\$13,841	\$14,118

CURRICULUM PROPOSAL FORM

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? [200 words]

Student fees will be used for faculty travel to conduct clinical visits, subscription to clinical tracking software (Typhon), etc., as required for all CON DNP students. No additional expenses are anticipated with the implementation of this new program.

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? [150 words]

N/A

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

N/A

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? [150 words]

N/A

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? [150 words]

N/A

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

The existing College of Nursing Graduate Nursing Program fee of \$50.00 per credit will be applied to students enrolled in the PMHNP Certificate program.

14. Complete the fiscal analysis form.

See attached.

Signature/Date

College or School Dean:

1

12/14/2021 | 3:30 PM MST

Chief Academic Officer:

December 2021

Docusigned by:

Robert Mokwa

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12/14/2021 | 3:30 PM MST

CURRICULUM PROPOSAL FORM

Chief Executive Officer:

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Pocusigned by:

Robert Mokwa
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12/14/2021 | 3:30 PM

DocuSigned by:

Flagship President*:

Flagship Provost*:



12/14/2021 | 3:30 |

Appendix A – Proposed New Curriculum

PMHNP Clinical Courses:

Total credits: 31 delivered over 5 semesters.

NRSG 629: Introduction to Advanced Practice Psychiatric Mental Health Nursing:

Course Description: This graduate course is designed as an introduction into advanced practice psychiatric-mental health nursing. Orientation to the clinical practice of the psychiatric mental health advanced practice nursing is presented along with topics regarding working with the mental health preceptor. Focus is placed on developing early interview skills by teaching students their role in various mental health settings. Review of clinical practice expectations will be included. Topics of this course include interviewing and assessing the patient with mental health concerns, completing the mental status examination and completing a safety assessment. Students will orient to the DSM 5 and other relevant interview/assessment resources. Students will begin to explore the documentation associated with the above. Credits: 2 (1 lecture; 1 lab)

NRSG 630: Advanced Psychopharmacology II:

Course Description: Advanced concepts in the clinical management of psychiatric symptoms. Analyze psychotropic interventions, mechanisms of action and indications of use, dosing, side effects, drug interactions, contraindications, and patient education. Psychotropic agents and complimentary alterative medicine. Credits: 3 (3 lecture)

NRSG 631 Advanced Clinical I:

Course Description: This graduate nursing course is designed as an introduction into advanced practice psychiatric-mental health nursing. The role and scope of advanced psychiatric nursing practice and foundational legal and ethical issues are explored. The neuroanatomy and neurophysiology of psychiatric disorders are reviewed and their implications in the provision of psychiatric care are examined. Conducting comprehensive and systematic psychiatric assessments in complex situations, while incorporating diverse and culturally sensitive approaches with populations across the lifespan is emphasized. The application of relevant evidence-based findings to develop practice guidelines and improve practice and the practice environment is stressed. Credits: 6 (3 lecture; 3 clinical lab)

NRSG 632 Advanced Clinical II:

^{*}Not applicable to the Community Colleges.

CURRICULUM PROPOSAL FORM

Course Description: This course includes selected therapeutic modalities for individuals, group psychotherapy, and the integration of multicultural skills for health promotion and management of mental health problems and psychiatric disorders. Emphasis is placed on the assessment and management of psychiatric conditions with individuals and groups across the lifespan within culturally diverse environments. The application of relevant evidence-based findings is used to guide development of professional practice. Credits: 6 (3 lecture; 3 clinical lab)

NRSG 633 Advanced Clinical III:

Course Description: This graduate nursing course builds upon content and skills attained in Advanced Clinical I and II. Conceptual and theoretical foundations for psychotherapy, including selected therapeutic modalities for couples and families, are examined. A focus on educating and guiding individuals and families with mental health problems or psychiatric disorders who have acute and/or chronic mental health needs through complex health and situational transitions is emphasized. Planning care to minimize the development of complications and promote function and quality of life using psychopharmacology while incorporating appropriate prescriptive considerations is explored. The application of relevant evidence-based findings to develop practice guidelines and improve practice and the practice environment is stressed. Credits: 6 (3 lecture; 3 clinical lab)

NRSG 634 Advanced Clinical IV: Course Description: This graduate nursing course builds upon content and skills attained in Advanced Clinical I, II, and III. In this practicum students will further refine their role as a doctor of nursing practice demonstrating expertise, specialized knowledge, and expanded responsibility and accountability in the advanced psychiatric care and management of individuals and families. Designing and implementing processes to evaluate outcomes of practice, practice patterns, and systems of health care within a practice setting is stressed. Methods of collaboration and the dynamics of complex relationships with other health care professionals is explored. The development of consultative and leaderships skills to facilitate change in psychiatric healthcare and healthcare delivery systems is emphasized. The application of relevant evidence-based findings to develop practice guidelines and improve practice and the practice environment is stressed. Credits: 8 (2 lecture; 6 clinical lab).

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS: Bozeman
AWARD LEVEL: Grad

PROGRAM NAME: Certificate in Psychiatric Mental Health Nurse Practitioner

PROGRAM CODE:

		FY2022	FY2023	FY2024	FY2025	FY2026
ENROLLMENT P	ROJECTIONS					
Headcount						
annual unduplicated headcount of st minor within the program	cudents with declared major or	2	4	4	4	4
Credit Hours						
annual avg. credits hours earned per curriculum	student in program related	15	15	15	15	15
Student FTE						
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24		1.25	2.5	2.5	2.5	2.5
Completions						
Annual number of program complete	ers	0	2	2	2	2
REVEN	IUE					
Tuition Revenue (net of waivers) Institutional Support Other Outside Funds (grants, gifts, et	cc.)	\$6,785	\$13,841	\$14,118	\$14,400	\$14,688
Program Tuition/Fees	·	\$1,500	\$3,000	\$3,000	\$3,000	\$3,000
Total Rev Total Revenue pe		\$8,285 \$6,628	\$16,841 \$6,736	\$17,118 \$6,847	\$17,400 \$6,960	\$17,688 \$7,075
EXPENDI	TURES					
Tenure Track Faculty	FTE	0.000	0.000	0.000	0.000	0.000
	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Non-tenure Track Faculty *Includes Adjunct Instructors	FTE Salary + Benefits	0.0 \$0	0.0 \$0	0.0 \$0	0.0 \$0	0.0 \$0
	FTE FTE	0.0	0.0	0.0	0.0	0.0
Graduate Teaching Assistants	Salary + Benefits	\$0	\$0	\$0	\$0	\$0
Staff	FTE	0.0	0.0	0.0	0.0	0.0
	Salary + Benefits FTE	\$0 0.0	\$0 0.0	\$0 0.0	\$0 0.0	\$0 0.0
Total Faculty & Staff	Salary + Benefits	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Operations (supplies, travel, rent, etc	c)	\$1,500	\$3,000	\$3,000	\$3,000	\$3,000
Start-up Expenses (OTO)						
Total Exp	enses	\$1,500	\$3,000	\$3,000	\$3,000	\$3,000
Student FTE to Facult	y (TT + NTT) Ratio	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1 1-	- \	A	440.044	40000	400.00	444-000

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.

\$6,785

\$14,118

\$14,400

\$14,688

Campus Chief Financial Officer Signature

\$13,841

Chief Financial Officer Comments

Net Income/Deficit (Revenue - Expenses)

The information above outlines the expenditures to run the program and indicates a need for institutional support. Institutional support has not yet been identified or approved. The college may need to reallocate funds internally to fund all, or a portion of, this program.

My signature above represents that the information on this form is accurate based on the knowledge I have on the date it is signed. My signature does not represent any form of approval for this program, including approval for institutional funding. --Terry Leist

Montana University System

REQUEST TO PLAN FORM

ITEM XXX-2010-R0521

Meeting Date: May 2021

Item Name

Program/Center/Institute Title: Psychiatric Mental Health Nurse Practitioner

Planned 6-digit CIP code:

51.3810

Across the Life Span Certificate

Campus, School/Department: Montana State University- College of Nursing

Expected Final Submission Date: March BOR

Contact Name/Info: Susan Raph sraph@montana.edu

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit http://mus.edu/che/arsa/academicproposals.asp.

1) Provide a description of the program/center/institute.

The CON currently offers an option in the Doctor of Nursing Practice (DNP) program to specialize as a psychiatric mental health nurse practitioner (PMHNP). This proposed certificate program would allow advanced practice registered nurses (APRN) already nationally certified in another specialty area (e.g., family nurse practitioner, midwifery, pediatric, adult-geriatric, etc) to become nationally certified as a psych-mental health nurse practitioner by completing 29-35 credits and 500+ hours of direct patient clinical contact. All courses for the proposed PMHNP certificate program currently exist in the CON DNP program. No new courses will need to be developed and no additional sections of courses will be taught. Enrollment in this certificate program would be limited to open "seats" in the existing psych-mental health DNP didactic courses and available PMHNP clinical preceptors. No additional funds are required for this program. Increased efficiency of existing course offerings is anticipated by fully enrolling didactic courses and clinical sections.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).

There is a critical shortage of psychiatric-mental health providers in the State of Montana and across the U.S. This program will allow current APRNs to shift or expand their focus to include care of persons experiencing acute or chronic mental illness. The MSU CON receives frequent inquiries of interest regarding a PMHNP certificate program. Estimated number of interested applicants annually is 5-10 with an estimated annual enrollment limited to 2-6 students based on available space in didactic and/or clinical courses.

3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.

The college will need to reallocate funds internally to fund all, or a significant portion of this program. At this time, no additional institutional support has been identified or budgeted for the program and no new or additional faculty lines or GTA support are available from central sources to support this program. All courses required for this certificate program are currently being offered in the CON's DNP program. No new courses will be created. Certificate students will be limited to the number who can be accommodated within existing sections and clinical sites. Hence, no new resources are requested to launch or sustain this program.

Montana University System

REQUEST TO PLAN FORM

4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).

Not applicable. All courses included within this certificate program are only offered by MSU College of Nursing.

5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.

A Psychiatric Mental Health NP Certificate program aligns with the AY 20-21 MSU Academic Priorities and Planning Statement by specifically addressing MSU Strategic Plan goals 1.2: Expand high quality graduate education, and 3.2: Grow mutually beneficial partnerships across Montana.

Signature/Date	
Chief Academic Officer: Robert Mokwa 212A28411AC04BD	2/2/2021 4:46 PM
Chief Executive Officer: DocuSigned by: 7D6A4CE96C3F415	2/2/2021 4:46 PM
Flagship Provost**: Robert Mokwa 212A28411AC04BD	2/2/2021 4:46 Pt
Flagship President**: DocuSigned by: *Center/Institute Proposal only 7D6A4CE96C3F415	2/2/2021 4:46 PM
**Not applicable to the Community Colleges.	

MONTANA UNIVERSITY SYSTEM

REQUEST TO PLAN – OCHE ANALYSIS

ITEM 194-2010-R0521

<u>Request to Plan a Psychiatric Mental Health Nurse Practitioner Across the Life Span Certificate – Montana State University-Bozeman</u>

	the same		No. 17.315			
		OCHE A	VALYSIS			
Labor market outlook	ave ave nex Doo	According to O*Net, the Nurse Practitioner field will grow rapidly in the next ten years. Currently, the average salary in for Nurse Practitioners in Montana is \$114,970, which is higher than the national average of \$111,680. The broad field of Mental Health practice is also projected to grow rapidly in the next ten years. Nationally, the majority of NP jobs require a Master's degree and about 10% require a Doctorate or Post-Baccalaureate certificate, and 62% of mental health positions require a Master's degree.				
Related programs / centers / institutes	None					
	х	Only incidental costs	MEDIUM	HIGH		
Budget Impact	All courses needed already exist and no new faculty need to be hired.					
CAO discussion and follow-up	No concerns were raised during the CAO call.					
ARSA/BOR comment and direction for Level II proposal						

ACADEMIC ITEMS MEMORANDUM

DATE: February 3rd, 2022

TO: Chief Academic Officers, Montana University System

FROM: Brock Tessman, Deputy Commissioner for Academic, Research, and Student Affairs

RE: January 2022 Academic Items

Contained within this memorandum are Level I and Level II proposals submitted by the institutions of the Montana University System in January, 2022. These proposals include items for which approval authority has been designated by the Board of Regents to the individual institutions or the Commissioner of Higher Education. These Level I items are being sent to you for your review. If you have concerns about a particular proposal, you should share those concerns with your colleagues at that institution and try to come to some understanding. If you cannot resolve your concerns, raise them at the Chief Academic Officer's conference call on February 16th. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, February 18th. You will be notified of approved proposals by February 23rd. The Board of Regents will be notified of the approved proposals at the March meeting of the Board.

LEVEL I ITEMS:

1. Campus Approvals

Montana State University Bozeman:

 Notification of intent to offer an Associate of Science Pre-Healthcare option Item #2011-LI0122

LEVEL II ITEMS:

Great Falls College Montana State University:

- Request for authorization to establish an A.A.S. in Office Management and Supervision Item #2901-R1121 | Curriculum Form | Fiscal Form | Request to Plan
- Request for authorization to offer a C.A.S. in Office Support
 Item #2902-R1121 | Curriculum Form | Fiscal Form | Request to Plan
- Request for authorization to create an A.A. Substance Abuse and Addictions Emphasis
 Item #2903-R1121 | Curriculum Form | Fiscal Form | Request to Plan

Montana Technological University:

- Request to establish the Center for Academic Innovation (CAI)
 Item #1501-LII0222 | Center Form | Request to Plan
- Request for authorization to terminate the Geophysics BS degree and consolidate it into an option within the Geological Engineering BS program
 Item #1502-LII0222 | Curriculum Form | Fiscal Form | Termination Form

Helena College University of Montana:

Request to Establish a C.A. S. in Avionics Technology
 Item #1902-R0322 | Curriculum Form | Fiscal Form | Request to Plan

ACADEMIC PROPOSAL REQUEST FORM

January 2022

ITEM 2011-LI0122

ITEM TITLE: Request authorization to offer an Associate of Science Pre-Healthcare option	
Institution: Gallatin College MSU CIP Code:	
Program/Center/Institute Title: Associate of Science	
Includes (please specify below): Face-to-face Offering: Online Offering: Blended Offering:	
Options: Pre-Healthcare Option	
Proposal Summary [360 words maximum]	
What: This Pre-Healthcare option is designed for students completing Core and pre-requisite courses for transfer into either a Bachelor's or Associate's degree program in the health sciences (e.g., Nursing, dental hygiene, surgical tech). The courses required for this degree option include the MSU Core and pre-requisite science courses as determined through advising to rethe requirements of the student's intended goal.	nee
Why:	
By adding this option, Gallatin College can more easily identify and advise students whose intention is to complete pre-healt and science course requirements for eventual transfer into a health care degree program. In addition, Gallatin College has a joint NIH grant with MSU to encourage community college students to pursue STEM, particularly bio-medical, degree program. Adding this concentration option helps us to more specifically identify interested students who might participate in our joint NIH summer internship/research program.	ams
Resources:	
Gallatin College already offers the Associate of Science (AS) degree program, so this is an optional concentration that AS students could select. It would not take any additional resources and instead will provide a way to more clearly identify students for advising, course selection, and promoting opportunities.	
ATTACHMENTS none	
Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an ite request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp .	
xA. Level I:	
Campus Approvals	

January 2022 Academci Item Memorandum 2 of 89

ACADEMIC PROPOSAL REQUEST FORM

	1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form)
	1b. Withdrawing a postsecondary educational program from moratorium
	2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
X	3. Establishing a B.A.S./A.A./A.S. area of study
	4. Offering an existing postsecondary educational program via distance or online delivery
ОСНІ	E Approvals
	5. Re-titling an existing postsecondary educational program
	6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
	7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
	8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
	9. Revising a postsecondary educational program (Curriculum Proposal Form)
	10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
<u>B.</u> L	evel II:
	1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form
	2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
	3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11
	4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
	5. Re-titling an academic, administrative, or research unit

ACADEMIC PROPOSAL REQUEST FORM

January 2022

ITEM 2901-LI0122

equest for authorization to establish an AAS in Office Management and Supervision						
Institution:	Great Falls College Montana State University	CIP Code:	52.0204			
Program/Center/Institute Title:	Associate of Applied Science in Office Managem	ent and Supervision	1			
Includes (please specify below):	Face-to-face Offering: Online Offering:	Blended Offering:	<u>X</u>			
Options:						

Proposal Summary [360 words maximum]

What: The Associate of Applied Science in Office Management and Supervision will provide students with a general background in business designed to prepare graduates for a wide range of entry-level jobs in the public and private sector. The program will consist of a combination of general education and technical coursework in communication, computer application skills, business, human resources, and accounting. Graduates from this program will have the necessary skills to obtain work in a professional workplace setting.

Why: This degree is designed to meet the local and statewide need for skilled workers in the business industry and will prepare students for a variety of occupations in the business finance, management, and administrative support fields. The O*Net database lists several of these job positions for this degree as "Bright Outlook" occupations expected to experience rapid growth or have a large number of job openings in the next few years. In addition, the U.S. Bureau of Labor Statistics (2021) notes that employment in business, financial, and management occupations is projected to grow faster than the average of all occupations from 2019 to 2029. Locally, the Great Falls Area Chamber of Commerce supports the development of this program to provide employees for local businesses and organizations.

Resources: This program will be developed and offered with existing faculty at the college as part of the current Accounting/Business, Computer Technology and General Studies departments. Additional adjunct instructors will be hired as needed. No additional resources for building space, equipment, or classroom materials are anticipated.

ATTACHMENTS

2901-LII1221_Curr 2901-LII1221_Fisc 2901-LII1221_A1 Request to Plan

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

ACADEMIC PROPOSAL REQUEST FORM

A. Le	vel I:
Campı	us Approvals
<u> </u>	La. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form)
	1b. Withdrawing a postsecondary educational program from moratorium
:	2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
;	3. Establishing a B.A.S./A.A./A.S. area of study
	4. Offering an existing postsecondary educational program via distance or online delivery
OCHE	Approvals
!	5. Re-titling an existing postsecondary educational program
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	3. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9	9. Revising a postsecondary educational program (Curriculum Proposal Form)
:	10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. Le	vel II:
X	1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form)
	2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
	3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11
	4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
	5. Re-titling an academic, administrative, or research unit

CURRICULUM PROPOSAL FORM

1. Overview of the request and resulting changes. Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. [100 words]

The Associate of Applied Science in Office Management and Supervision provides students with a general background in business designed to prepare graduates for a wide range of entry-level jobs in the public and private sector. This new program includes an embedded Certificate of Applied Science in Office Support. It also shares numerous courses with the current AAS Accounting program, providing opportunities for students to earn multiple credentials, if desired. This AAS is designed for students who want to earn a broad range of technical business skills rather than specializing in accounting coursework or pursuing a four-year degree in business administration.

2. Relation to institutional strategic goals. Describe the nature and purpose of the new program in the context of the institution's mission and core themes. [200 words]

The 2021-2022 Academic Priorities and Planning Statement outlines Great Falls College's focus on providing quality education to improve students' lives and fill the workforce needs of the local community, region, and state. This proposed program trains traditional students and retrains non-traditional students to move from physically-demanding jobs that require shiftwork into an office atmosphere that often includes benefits and more favorable working conditions. Additional business-related credentials were identified in the Academic Priorities and Planning Statement as an area that would benefit the students at Great Falls College who, like many two-year college students, tend to be older and place bound by families and jobs. Offering this credential at Great Falls College would enhance the current academic offerings and provide new opportunities for the students served by Great Falls College.

3. Process leading to submission. Briefly detail the planning, development, and approval process of the program at the institution. [100 words]

A Request to Plan (RTP) was presented to various entities on campus including the Academic Affairs Leadership Team, Executive Team, and College Planning and Budget Analysis Committee. Advisory Board members were contacted via email and provided input on the proposed curriculum. The program was also discussed with the technical faculty/program directors on campus who have courses included within the curriculum in preparation for the Board of Regents meeting in November. The RTP was approved at the November 2021 Board of Regents meeting. The curriculum was approved by the campus Curriculum Committee December 3, 2021.

4. Program description. Please include a complete listing of the proposed new curriculum in Appendix A of this document.

CURRICULUM PROPOSAL FORM

a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	36
Credits in required courses offered by other departments	21
Credits in institutional general education curriculum	15
Credits of restricted electives	6
Total credits required to complete the program	60-61

- b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.
- Create and maintain business records.
- Use office software applications.
- Communicate professionally, both orally and in writing.
- Apply an understanding of common business structures and functions in the decision-making process.
- Coordinate and direct office services.
- Analyze the legal and ethical implications of business decisions.
- Demonstrate an understanding of current application and practice related to the supervision of others.
- **5. Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. [250 words

The AAS Office Management and Supervision degree will prepare students for a variety of specific occupations in a variety of industries in the business finance, management, and administrative support fields. Sample job titles may include, but are not limited to, Administrative Supervisor, Customer Service Manager, Office Coordinator, Office Manager, Office Supervisor, Office Clerk, Administrative Assistant, Executive Administrative Assistant, Customer Service Representative, Claim Processor, and New Account Clerk.

CURRICULUM PROPOSAL FORM

Table 1. Projected Annual Openings in Montana for 2018 -2028

Job Title	Projected Annual Openings 2018 - 2028
First-line Supervisor of Office and Administrative	450
Support Workers (43-1011) *	
Administrative Services Managers (11-3012) *	20
Office Clerk (43-9061) *	1,600
Customer Service Representative (43-4051) *	730
Administrative Assistants (43-6014) *	650
Executive Administrative Assistant (43-6011)	70
Claim Processor (43-9041)	60
New Account Clerk (43-4141)	20

Job titles designated with a * in Table 1 are noted as jobs with a "Bright Outlook" in the O*Net database. Bright Outlook occupations are expected to experience rapid growth or have a large number of job openings in the next few years.

The U.S. Bureau of Labor Statistics (2021) notes that employment in business, financial, and management occupations are projected to grow faster than the average of all occupations from 2019 to 2029. Additionally, the U.S is currently experiencing a labor shortage, with the U.S. Chamber of Commerce (2021) reporting more jobs than workers available in the professional and business services industry. The Great Falls Area Chamber of Commerce supports the development of this program to provide local employees.

Resources

National Center for O*NET Development. *O*NET OnLine*. https://www.onetonline.org
SHRM. (2019). The Skills Gap. https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/documents/shrm%20skills%20gap%202019.pdf

U.S. Bureau of Labor Statistics. (2021, April 9). Occupational Outlook Handbook. https://www.bls.gov/ooh/

- U.S. Chamber of Commerce. (2021, June 1). The America Works Report: Quantifying the Nation's Workforce Crisis. https://www.uschamber.com/report/the-america-works-report-quantifying-the-nations-workforce-crisis
- **6. Similar programs.** Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title
City College	AAS	General Applied Business
Dawson Community College	AAS	Business Management
Flathead Valley Community College	AAS	Business Administration
Helena College	AAS	Business Technology

CURRICULUM PROPOSAL FORM

Highlands College	AAS	Business Technology
Miles Community College	AAS	Office Administration & Technology
Missoula College	AAS	Business Management
UM Western	AAS	Business

If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. [200 words]

The program most closely related to the proposed program would be Office Administration & Technology at Miles Community College. The other programs in the Montana University System closely related are geared toward transferring into business programs, rather than occupational-focused like the one proposed by Great Falls College. In addition, like many two-year students, the students at Great Falls College tend to be "place bound," meaning they are unlikely to move to pursue an education because of employment, family, and financial responsibilities and barriers. Thus, it is important to provide an opportunity for students to enter the business workplace through a local educational institution.

a. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. [200 words]

This proposed AAS degree is designed as a stackable credential on top of the proposed Certificate of Applied Science in Office Support that is also currently being proposed under a separate Level II. Offering these two programs at Great Falls College provides students with multiple opportunities to enter the workforce.

Great Falls College has articulation agreements in place for bachelor's degrees in business disciplines with MSU Billings, MSU Bozeman, MSU Northern, and Montana Tech. This proposed AAS program is not designed to transfer directly to a bachelor's program; however, the coursework could be applied toward a separate associate's transfer degree or transferred as articulated coursework to another institution.

Great Falls College has shared the intent to begin the program with all of the colleges in the Montana University System and gained full support.

7. Implementation of the program. When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. [100 words]

The program is intended to be in place for the Fall 2022 semester.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

CURRICULUM PROPOSAL FORM

	Graduates								
AY_23	AY 24	AY25	AY_26	AY27	AY_23	AY24_	AY_25	AY_26	AY_27
15	20	25	25	30	0	8	12	15	15

Note: The headcount is different than expected FTE as many two-year students attend college part time.

b. Describe the methodology and sources for determining the enrollment and graduation projections above. [200 words]

Anticipated demand for this program is based on the projected annual openings in Montana as well as by gauging the level of interest of students enrolled in various sections of BGEN 105 Introduction to Business. There were approximately 100 students enrolled in the most recent sections of BGEN 105 (Spring-Fall 2021), many of whom identified as interested in a business-related degree but not the current accounting degree offered at Great Falls College. This credential offers another option for those students.

c. What is the initial capacity for the program?

Initial capacity for the program would be 25 (the current maximum capacity for course enrollment); however, Great Falls College does not plan to limit overall program capacity enrollments.

8. Program assessment. How will success of the program be determined? What action would result if this definition of success is not met? [150 words]

The success of the program will be measured using the same metrics identified within the annual snapshot reports produced by Great Falls College's Institutional Researcher for each program on campus as well as through feedback from the programmatic advisory board and graduate surveys. The program will also be assessed through the campus' existing Internal Academic Program Review (IAPR) process. Based on data, the Internal Academic Program Review Committee makes recommendations as to the continuance or changes to be made to programs. In addition, the Academic Affairs Leadership Team also reviews and discusses programs. The Executive Team considers recommendations to determine a program's continuance or needed changes.

a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? [150 words]

Assessment of program-level learning outcomes is achieved through the campus student learning outcomes assessment process. Program directors carefully align program and course-level outcomes through curriculum mapping. Faculty assess student learning at the course level, tying assessment activities to course, program, and institutional learning outcomes. Programs articulate assessment plans and set goals, measured through identified assessments in courses and metrics set by program directors. Assessment progress reports are submitted annually to the director of teaching and learning innovation for review and feedback. Annually, programs review their previous year's assessment progress, set and

CURRICULUM PROPOSAL FORM

revise goals, and make changes as appropriate. More information about the student learning assessment process can be found at http://gfcmsu.edu/about/assessment/resources.html.

b. What direct and indirect measures will be used to assess student learning? [100 words]

Direct measures of student learning assessment would include in-class and out-of-class activities, quizzes, projects, exams, presentations, and papers. Indirect measures of student learning include course evaluations, enrollment information, and program review data.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? [100 words]

The student learning outcomes assessment process encourages continuous improvement by facilitating the review of assessment data, leading to curricular and instructional improvements. Programs receive feedback, support, and coaching during the annual reporting process, ensuring curricular and instructional quality. Previous assessment reports can be found at http://gfcmsu.edu/about/assessment/evidence.html.

The Internal Academic Program Review process, while not directly measuring student learning assessment, ensures overall program quality and viability, as described in the Internal Academic Program Review handbook at https://www.gfcmsu.edu/about/assessment/documents/IAPRCH Handbook.pdf.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. [100 words]

N/A –No outside accrediting organization exists for the program.

9. Physical resources.

a. Describe the <u>existing</u> facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? [200 words]

The Great Falls College campus has the facilities, equipment, space, instructional supplies, computers and other related technology to meet the needs of adding this program to its academic offerings. Classroom space with technology to conduct HyFlex courses already exists, as does an online learning management system. Existing programs will not be impacted by the addition of the new program.

b. List <u>needed</u> facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? [150 words]

Existing facilities, equipment, and classroom space are sufficient for this program.

10. Personnel resources.

CURRICULUM PROPOSAL FORM

a. Describe the <u>existing</u> instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? [200 words]

Great Falls College has existing instructional, support, and administrative resources available to ensure a successful implementation of the program. This program will be developed and offered with existing faculty in place at the college as part of the current Accounting/Business, Computer Technology and General Studies departments. Tutors in business are already available through the Academic Support Center. The Executive Director of Instruction and the CEO/Dean are involved in developing and ensuring the program implementation is successful.

b. Identify <u>new</u> personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? [150 words]

For the first year, adjunct instructors will be hired for BGEN 105 Introduction to Business, ACTG 101 Accounting Procedures I, ACTG 180 Payroll Accounting, CAPP 131 Basic MS Office, CAPP 156 MS Excel, and BMGT 245 Customer Service Management. The second year, additional adjuncts will be hired for BGEN 110 Applied Business Leadership, BMKT 225 Marketing, BMGT 215 Human Resource Management, and BMKT 131 Introduction to Social Marketing. Some of our existing Business, Accounting and Computer adjunct instructors will be used to teach these classes. New adjuncts will be solicited from the advisory board and community contacts. Please see the attached Fiscal Analysis Form for costs.

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? [100 words]

Yes - The Library is staffed to meet business students' needs. Professional advisors, admissions, financial aid and other student and business services already exist and meet the needs of the program's students.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? [150 words]

Yes - Other programs will not be negatively impacted. Existing resources, such as advising, the library staff, and financial aid, have the capacity to absorb the new students brought to Great Falls College through this program.

The implementation of the Office Management and Supervision program at Great Falls College would enhance and diversify the student make-up within the proposed cross-disciplinary courses making for more robust learning environments.

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. [100 words]

Costs to start this program are minimal and should be offset by tuition revenue.

CURRICULUM PROPOSAL FORM

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues	\$77,609	\$108,652	\$124,174
Expenses	\$45,160	\$54,700	\$54,700
Net Income/Deficit (revenues-expenses)	\$32,449	\$53,952	\$69,474

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? [200 words]

Anticipated student tuition will cover the expense of the additional adjunct instructors. Existing facilities, equipment, and classroom space will be sufficient for this program.

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? [150 words]

N/A

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

\$13,010 for adjunct instructors FY2023, followed by an additional \$9,540 FY2024.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? [150 words]

N/A

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? [150 words]

N/A

CURRICULUM PROPOSAL FORM

13	Student fees.	. If the propo	sed program	intends to	impose nev	v course,	class, I	ab, or	program t	fees,	please	ist
	the type and	amount of th	ne fee.									

N/A

14. Complete the fiscal analysis form.

Signature/Date

College or School Dean:

StephanioColman

Chief Academic Officer:

StephanioGlana

Chief Executive Officer:

Stephanibalma

Flagship Provost*:

Flagship President*:

*Not applicable to the Community Colleges.

CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

First Year Fall		0 111
Course Number	Course Description	Credits
BGEN 105	Introduction to Business	3
CAPP 131	Basic MS Office	3
WRIT 121	Intro to Technical Writing	3
M 105	Contemporary Mathematics	3
COMX 115	Interpersonal Communication	<u>3</u>
	First Year Fall Credits	15
First Year Spring		
Course Number	Course Description	Credits
ACTG 101	Accounting Procedures I	3
CAPP 156	MS Excel	3
BMGT 245	Customer Service Management	3
ACTG 180	Payroll Accounting	3
Choose one of the following:		
WRIT 220	Business & Prof Writing OR	3
BGEN 215	Career Readiness AND	2
CAPP 110	Short Courses: MS Outlook	1
	First Year Spring Credits	15
Second Year Fall	•	•
Course Number	Course Description	Credits
BMGT 235	Management	3
BGEN 110	Applied Business Leadership	3
BMKT 225	Marketing	3
BMGT 215	Human Resource Management	3
Choose one of the following:	- J	
BMKT 131	Introduction to Social Marketing OR	3
CSCI 181	Web Design	4
	Second Year Fall Credits	15-16
Second Year Spring	1	1
Course Number	Course Description	Credits
CAPP 266	Advanced MS Excel Applications	3
ACTG 205	Computerized Accounting	3
BGEN 235	Business Law	3
Restricted Electives	(see list below)	6
	Second Year Spring Credits	15
	TOTAL PROGRAM CREDITS	60-61
	TOTAL I NOGRAMI CREDITS	00-01

CURRICULUM PROPOSAL FORM

Restricted Electives – program requires 6 credits		
ACTG 202	Principles of Managerial Accounting	3
BGEN 220	Business Ethics and Social Responsibility	3
BGEN 298	Internship	1-6
BMKT 131	Introduction to Social Media Marketing	3
CSCI 181	Web Design	4
BGEN 215	Career Readiness	2
CAPP 110	Short Courses: MS Outlook	1
COMX 111	Public Speaking	3
AHMS 105	Health Care Delivery	2
OR other courses with advisor approval		

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS:

AWARD LEVEL:

PROGRAM NAME:

Office Supervision and Management

PROGRAM CODE:

AAS

		FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
ENROLLMENT P	ROJECTIONS					
Headcount					T	
annual unduplicated headcount of s minor within the program	tudents with declared major or	15	20	25	25	30
Credit Hours						
annual avg. credits hours earned pe curriculum	r student in program related	20	20	20	20	20
Student FTE						
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24		10	13	17	17	20
Completions		-				
Annual number of program complet	rers	0	8	12	15	15
REVEN	IUE					
Tuition Revenue (net of waivers)		\$28,449	\$36,983	\$48,363	\$48,363	\$56,897
Institutional Support		\$49,160	\$68,824	\$78,656	\$98,320	\$122,900
Other Outside Funds (grants, gifts, etc.)						
Program Tuition/Fees						
Total Rev		\$77,609	\$105,807	\$127,019		\$179,797
Total Revenue pe	er Student FTE	\$7,761	\$8,139	\$7,472	\$8,628	\$8,990
EXPENDIT	TURES					
Tenure Track Faculty	FTE	0.5	0.5	0.5	0.5	0.5
Tenure Track racuity	Salary + Benefits	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000
Non-tenure Track Faculty	FTE	0.5	0.8	0.8	0.8	0.8
*Includes Adjunct Instructors	Salary + Benefits	\$13,010	\$22,550	\$22,550	\$22,550	\$22,550
Graduate Teaching Assistants	FTE C. L. D. C.					
	Salary + Benefits FTE					
Staff	Salary + Benefits					
	FTE	1.0	1.3	1.3	1.3	1.3
Total Faculty & Staff	Salary + Benefits	\$45,010	\$54,550	\$54,550	\$54,550	\$54,550
Operations (supplies, travel, rent, et	c)	\$150	\$150	\$150	\$150	\$150
Start-up Expenses (OTO)		\$0				
Total Exp	enses	\$45,160	\$54,700	\$54,700	\$54,700	\$54,700
Student FTE to Facult	v (TT + NTT) Ratio	10.0	10.0	13.1	13.1	15.4
Net Income/Deficit (Re		\$32,449	\$51,107	\$72,319		\$125,097
ivet income/ bencit (Ne	venue Expenses	732,443	331,107	712,313	771,765	7123,037

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.

Campus Chief Financial Officer Signature

Chief Financial Officer Comments

	Chief Financial Officer Comments				
I	Anticipation of full time and part time students within program, thus difference in headcount vs. FTE calculations.				
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ITEM 197-2901-R1121

Meeting Date: November 2021

Request for authorization to plan an Associate of Applied Science in Office Management and Supervision

Program/Center/Institute Title:

Associate of Applied Science in Office

Management and Supervision

Planned 6-digit CIP code: 52.0204

Campus, School/Department: Great Falls College Montana State University

Expected Final Submission Date: Dec 2021

Contact Name/Info: Dr. Leanne Frost, Executive Director of Instruction

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit http://mus.edu/che/arsa/academicproposals.asp.

1) Provide a description of the program/center/institute.

As noted in the AY 2021-22 Academic Priorities and Planning Statement, Great Falls College Montana State University plans to offer more programs in the business discipline based on student demand and community need.

The business field provides myriad opportunities for students at all levels of higher education from the certificate to the graduate level. Students prepared with business-specific coursework are able to work in all industries supporting the accounting, finance, management, and marketing functions of an organization.

The Associate of Applied Science (AAS) in Office Management and Supervision will provide students with a general background in business designed to prepare graduates for a wide range of entry-level jobs in the public and private sector. The program will consist of a combination of general education and technical coursework in communication, computer application skills, business, human resources, and accounting. Graduates from this program will have the necessary skills to obtain work in a professional workplace setting.

This degree is designed to place students directly in the workforce after graduation. It is a complementary and stackable credential with the Office Support CAS credential that is also being proposed under a separate request to plan. While not specifically designed as a stackable credential for bachelor's-level business degrees, some of the coursework in this proposed AAS degree would transfer to a bachelor's degree in several business programs across the state.

This AAS degree is designed around a 60-credit curriculum that could be completed in four, full-time (15-credit load) semesters. Students would also have the option of completing this degree with a part-time credit load over a slightly longer timeframe.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).

The AAS Office Supervision and Management degree will prepare students for a variety of specific occupations in a variety of industries in the business finance, management, and administrative support fields. Sample job

titles may include, but are not limited to, Administrative Supervisor, Customer Service Manager, Office Coordinator, Office Manager, Office Supervisor, Office Clerk, Administrative Assistant, Executive Administrative Assistant, Customer Service Representative, Claim Processor, and New Account Clerk.

Table 1. Projected Annual Openings in Montana for 2018 -2028

Job Title	Projected Annual Openings 2018 - 2028
First-line Supervisor of Office and Administrative	450
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Customer Service Representative (43-4051) *	730
Administrative Assistants (43-6014) *	650
Executive Administrative Assistant (43-6011)	70
Claim Processor (43-9041)	60
New Account Clerk (43-4141)	20

Job titles designated with a * in Table 1 are noted as jobs with a "Bright Outlook" in the O*Net database. Bright Outlook occupations are expected to experience rapid growth or have a large number of job openings in the next few years.

The U.S. Bureau of Labor Statistics (2021) notes that employment in business, financial, and management occupations are projected to grow faster than the average of all occupations from 2019 to 2029. While the employment in office and administrative support sectors is projected to decline by five percent over the same period as a result of increased technology, openings are still expected to replace those leaving the workforce through retirements or normal attrition. Additionally, the U.S is currently experiencing a labor shortage, with the U.S. Chamber of Commerce (2021) reporting more jobs than workers available in the professional and business services industry.

The above-mentioned job titles typically require some college, work experience, or a combination of both education and experience. A frequent issue in the current labor shortage is that job applicants do not have the appropriate skills (SHRM, 2019). The curriculum for this proposed degree will include the relevant courses in business, human resources, accounting, communication, and technology that will allow students to upskill and enter the job market in the business sector as competitive applicants.

Resources

National Center for O*NET Development. *O*NET OnLine*. https://www.onetonline.org
SHRM. (2019). The Skills Gap. https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/documents/shrm%20skills%20gap%202019.pdf

- U.S. Bureau of Labor Statistics. (2021, April 9). Occupational Outlook Handbook. https://www.bls.gov/ooh/
- U.S. Chamber of Commerce. (2021, June 1). The America Works Report: Quantifying the Nation's Workforce Crisis. https://www.uschamber.com/report/the-america-works-report-quantifying-the-nations-workforce-crisis
- 3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.

This program would be developed and offered with existing faculty in place at the college as part of the current Accounting/Business and General Studies departments. Additional adjunct instructors may be necessary as the enrollments increase. No additional resources for building space, equipment, or classroom materials are anticipated.

4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).

This proposed AAS degree is designed as a stackable credential on top of the proposed CAS in Office Support that is also currently being proposed under a separate Request to Plan. Offering these two programs at Great Falls College provides students with multiple opportunities to enter the workforce.

Great Falls College has articulation agreements in place for bachelor's degrees in business disciplines with MSU Billings, MSU Bozeman, MSU Northern, and Montana Tech. This proposed AAS program is not designed to transfer directly to a bachelor's program; however, the coursework could be applied toward a separate associate's transfer degree or transferred as articulated coursework to another institution.

5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.

The 2021-2022 Academic Priorities and Planning Statement outlines GFC's focus on providing quality education to improve students' lives and fill the workforce needs of the local community, region, and state. This proposed program will provide training for traditional students and retraining for non-traditional students to move people from physically demanding jobs that require shiftwork into a professional atmosphere that often includes benefits and more favorable working conditions. Additional business-related credentials were identified in the Academic Priorities and Planning Statement as an area that would benefit the students at GFC who, like many two-year college students, tend to be older and place bound by families and jobs. Offering this credential at GFC would enhance the current academic offerings and provide new opportunities for the students served by GFC.

Signature/Date	
StephanioColina	
Chief Research Officer*:	
StephaneColma	=
Flagship Provost**: Robert Mokwa	10/1/2021 8:32 AM PDT

Flagship President**: DocuSigned by: DocuSigned by: DocuSigned by: DocuSigned by:	10/1/2021 8:32 AM PDT
*Center/Institute Proposal only	
**Not applicable to the Community Colleges.	

Montana University System REQUEST TO PLAN – OCHE ANALYSIS

ITEM 197-2901-R1121

ITEM NAME: Associate of Applied Science in Office Management and Supervision

		oc	HE ANA	LYSIS	
		eau of Labor Statistic ee pathway	s report	ts the following annual ope	enings for occupations related to
			Job	Title	Projected Annual Openings 2018 - 2028
		First-line Supervis Support Workers		ffice and Administrative .1) *	450
			·	/ //anagers (11-3012) *	20
abor market outlook		Office Clerk (43-90			1,600
				entative (43-4051) *	730
		Administrative As			650
				Assistant (43-6011)	70
		Claim Processor (4			60
		New Account Cler	k (43-4	141)	20
Related programs / centers / institutes		-			. Given the localized nature of enerally viewed as warranted.
	ro.	W Only incidental costs	x	MEDIUM	Substantial commitment of resources relative to institutional budget
Budget Impact	-		_	g faculty, classrooms, and e on program enrollment	equipment. Additional adjunct
CAO discussion and follow-up					
ARSA/BOR comment and direction for Level II proposal					

ACADEMIC PROPOSAL REQUEST FORM

January 2022

ITEM 2902-LI0122

Request for authorization to establish a CAS in Office Support

Institution:	Great Falls College Montana State L	Iniversity CIP Code:	52.0408
Program/Center/Institute Title:	Certificate of Applied Science in Off	ice Support	
Includes (please specify below):	Face-to-face Offering: Online Of	fering: Blended Offering:	_X
Options:			

Proposal Summary [360 words maximum]

What:

The Certificate of Applied Science in Office Support provides students with a general background in business and is designed to prepare graduates for a wide range of entry-level jobs in the public and private sectors. The program consists of general education and technical coursework in communication, computer application skills, and general business. Students obtaining this certificate will have the skills to move into a professional office environment.

This certificate is designed to quickly place students directly in the workforce but could also be used as a stackable credential to the proposed Associate of Applied Science in Office Management and Supervision.

Why:

This degree will prepare students for many occupations in a variety of industries. Sample job titles include, but are not limited to, Office Clerks, Administrative Assistants, Receptionists, Schedulers, File Clerks, Patient Representatives, Tellers, and Information Clerks. Several of these job titles are identified as "Bright Outlook" in the O*Net database. The Bureau of Labor Statistics notes employment in business, financial, and management occupations is projected to grow faster than the average for all occupations from 2019 to 2029.

This proposed certificate is designed to quickly provide students with the necessary skills that could be substituted for the relevant work experience that employers may desire. This creates a path for people who otherwise might not qualify for office-based positions to enter a professional work environment and fill a workforce need.

Resources:

This program will be developed and offered with existing faculty at the college as part of the current Accounting/Business, Computer Technology and General Studies departments. Additional adjunct instructors will be hired as needed. No additional resources for building space, equipment, or classroom materials are anticipated.

ACADEMIC PROPOSAL REQUEST FORM

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Attachments 2902-LII1221_Curr 2902-LII1221_Fisc 2902-LII1221_A1 Request to Plan

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

A. Level I:
Campus Approvals
1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form
1b. Withdrawing a postsecondary educational program from moratorium
2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
3. Establishing a B.A.S./A.A./A.S. area of study
4. Offering an existing postsecondary educational program via distance or online delivery
OCHE Approvals
5. Re-titling an existing postsecondary educational program
6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9. Revising a postsecondary educational program (Curriculum Proposal Form)
10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years

ACADEMIC PROPOSAL REQUEST FORM

X	<u>B.</u> L	evel II:
	X	1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form)
		2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
		3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11
		4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
		5. Re-titling an academic, administrative, or research unit

CURRICULUM PROPOSAL FORM

1. Overview of the request and resulting changes. Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. [100 words]

The Certificate of Applied Science in Office Support provides students with a general background in business and is designed to prepare graduates for a wide range of entry-level jobs in the public and private sectors. The program consists of general education and technical coursework in communication, computer application skills, and general business. Students obtaining this certificate will have the skills to move into a professional office environment.

This certificate is designed to quickly place students directly in the workforce but could also be used as a stackable credential to the proposed Associate of Applied Science in Office Management and Supervision.

2. Relation to institutional strategic goals. Describe the nature and purpose of the new program in the context of the institution's mission and core themes. [200 words]

The 2021-2022 Academic Priorities and Planning Statement outlines Great Falls College's focus on providing quality education to improve students' lives and fill the workforce needs of the local community, region, and state. This proposed certificate program trains traditional students and retrains non-traditional students to move from physically-demanding jobs that require shiftwork into a professional atmosphere that often includes benefits and more favorable working conditions. Additional business-related credentials were identified in the Academic Priorities and Planning Statement as an area that would benefit the students at Great Falls College who, like many two-year college students, tend to be older and place bound by families and jobs. Offering this credential at Great Falls College would enhance the current academic offerings and provide new opportunities for the students served by Great Falls College.

3. Process leading to submission. Briefly detail the planning, development, and approval process of the program at the institution. [100 words]

A Request to Plan (RTP) was presented to various entities on campus including the Academic Affairs Leadership Team, Executive Team, and College Planning and Budget Analysis Committee. Advisory Board members were contacted via email and provided input on the proposed curriculum. The program was also discussed with the technical faculty/program directors on campus who have courses included within the curriculum in preparation for the Board of Regents meeting in November. The RTP was approved at the November 2021 Board of Regents meeting. The curriculum was approved by the campus Curriculum Committee December 3, 2021.

4. Program description. Please include a complete listing of the proposed new curriculum in Appendix A of this document.

CURRICULUM PROPOSAL FORM

a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	14
Credits in required courses offered by other departments	16
Credits in institutional general education curriculum	9
Credits of free electives	0
Total credits required to complete the program	30

- b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.
 - Create and maintain business records.
 - Use office software applications.
 - Communicate professionally, both orally and in writing.
- **5. Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. [250 words]

The CAS Office Support -degree will prepare students for many occupations in a variety of industries. Sample job titles may include, but are not limited to, Office Clerks, Administrative Assistants, Receptionists, Schedulers, File Clerks, Patient Representatives, Tellers, and Information Clerks.

Table 1. Projected Annual Openings in Montana for 2018 - 2028

Job Title	Projected Annual Openings 2018 - 2028
Office Clerk (43-9061) *	1,600
Patient Representatives (29-2099) *	730
Administrative Assistants (43-6014) *	650
Receptionists and Information Clerks (43-4171) *	310
File Clerks (43-4071)	50
Other Office and Administrative Support (43-9199)	50

Job titles designated with a * in Table 1 are noted as jobs with a "Bright Outlook" in the O*Net database. The Bureau of Labor Statistics notes employment in business, financial, and management occupations are projected to grow faster than the average for all occupations from 2019 to 2029.

This proposed certificate is designed to quickly provide students with the necessary skills that could be substituted for the relevant work experience that employers may desire. This creates a path for people who otherwise might not qualify for office-based positions to enter the professional work environment and fill a workforce need. The median salaries for some of the positions are modest, but

CURRICULUM PROPOSAL FORM

these positions typically offer favorable working conditions (i.e. full-time work, day shifts, access to benefits packages) not frequently found in the retail and food service sectors where potential students for this certificate program might be otherwise employed.

Resources

National Center for O*NET Development. O*NET OnLine. https://www.onetonline.org

U.S. Bureau of Labor Statistics. (2021, April 9). Occupational Outlook Handbook. https://www.bls.gov/ooh/

6. Similar programs. Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title
Gallatin College	Professional certificate	Business Management

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. [200 words]

While there are a handful of business-related certificates offered at other two-year colleges in the state, these certificates are typically focused on a specific business function (i.e. management, entrepreneurship) or industry (i.e. agriculture) rather than general office support, which is the focus of this program. In addition, like many two-year students, the students at Great Falls College tend to be "place bound," meaning they are unlikely to move to pursue an education because of employment, family, and financial responsibilities and barriers. Thus, it is important to provide an opportunity for students to enter the business workplace through a local educational institution.

Great Falls College has shared the intent to begin the program with all of the colleges in the Montana University System and gained full support.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. [200 words]

This proposed CAS degree is designed as a stackable credential for both the proposed Associate of Applied Science Office Management and Supervision degree and the existing Associate of Applied Science in Accounting degree. Offering these programs at Great Falls College provides students with multiple opportunities to enter the workforce.

While there are no articulation agreements with other institutions currently in place related specifically to this certificate, this certificate is designed to complement the requirements for the majority of the business/accounting degrees offered throughout the state up to the bachelor's level. All courses included within this certificate program are included in the Common Course Numbering matrix and many have outcomes which are currently taught in other institutions; this supports easy transferability to other associate or bachelor programs across the MUS.

CURRICULUM PROPOSAL FORM

7. Implementation of the program. When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. [100 words]

This program is intended to be in place for the Fall 2022 semester.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

Fall Headcount Enrollment					Graduates				
AY_23	AY 24	AY 25_	AY 26	AY 27_	AY 23_	AY 24_	AY 25	AY 26_	AY 27
5	10	10	10	10	3	7	7	7	7

b. Describe the methodology and sources for determining the enrollment and graduation projections above. [200 words]

Anticipated demand for this program is based on the projected annual openings in Montana as well as by gauging the level of interest of students enrolled in various sections of BGEN 105 Introduction to Business. There were approximately 100 students enrolled in the most recent sections of BGEN 105 (Spring-Fall 2021), many of whom identified as interested in a business-related degree but not the current accounting degree offered at Great Falls College. This credential offers another option for those students.

c. What is the initial capacity for the program?

Initial capacity for the program would be 25 (the current maximum capacity for course enrollment); however, Great Falls College does not plan to limit overall program capacity enrollments.

8. Program assessment. How will success of the program be determined? What action would result if this definition of success is not met? [150 words]

The success of the program will be measured using the same metrics identified within the annual snapshot reports produced by Great Falls College's Institutional Researcher for each program on campus as well as through feedback from the programmatic advisory board and graduate surveys. The program will also be assessed through the campus' existing Internal Academic Program Review (IAPR) process. Based on data, the Internal Academic Program Review committee makes recommendations as to the continuance or changes to be made to programs. In addition, the Academic Affairs Leadership Team reviews and discusses programs. The Executive Team considers recommendations to determine a program's continuance or necessary changes.

a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? [150 words]

Assessment of program-level learning outcomes is achieved through the campus student learning outcomes assessment process. Program directors carefully align program and course-level outcomes through curriculum mapping. Faculty assess student learning at the course level, tying assessment activities to course, program, and institutional learning outcomes. Programs articulate assessment plans and set goals, measured through identified assessments in courses and metrics set by program directors.

CURRICULUM PROPOSAL FORM

Assessment progress reports are submitted annually to the director of teaching and learning innovation for review and feedback. Annually, programs review their previous year's assessment progress, set and revise goals, and make changes as appropriate. More information about the student learning assessment process can be found at http://gfcmsu.edu/about/assessment/resources.html.

b. What direct and indirect measures will be used to assess student learning? [100 words]

Direct measures of student learning assessment would include in-class and out-of-class activities, quizzes, projects, exams, presentations, and papers. Indirect measures of student learning include course evaluations, enrollment information, and program review data.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? [100 words]

The student learning outcomes assessment process encourages continuous improvement by facilitating the review of assessment data, leading to curricular and instructional improvements. Programs receive feedback, support, and coaching during the annual reporting process, ensuring curricular and instructional quality. Previous assessment reports can be found at http://gfcmsu.edu/about/assessment/evidence.html.

The Internal Academic Program Review process, while not directly measuring student learning assessment, ensures overall program quality and viability, as described in the Internal Academic Program Review handbook at https://www.gfcmsu.edu/about/assessment/documents/IAPRCH Handbook.pdf.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. [100 words]

N/A – No outside accrediting organization exists for the program.

9. Physical resources.

a. Describe the <u>existing</u> facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? [200 words]

The Great Falls College campus has the facilities, equipment, space, instructional supplies, computers and other related technology to meet the needs of adding this program to its academic offerings. Classroom space with technology to conduct HyFlex courses already exists, as does an online learning management system. Existing programs will not be impacted by the addition of the new program.

b. List <u>needed</u> facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? [150 words]

Existing facilities, equipment, and classroom space are sufficient for this program.

CURRICULUM PROPOSAL FORM

10. Personnel resources.

a. Describe the <u>existing</u> instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? [200 words]

Great Falls College has existing instructional, support, and administrative resources available to ensure successful implementation of the program. This program will be developed and offered with existing faculty as part of the current Accounting/Business, Computer Technology and General Studies departments. Tutors in business are already available through the Academic Support Center. The Library is staffed to meet business students' needs. Professional advisors, admissions, financial aid and other student and business services already exist. Other programs will not be impacted as existing resources have the capacity to absorb new students from this program.

b. Identify <u>new</u> personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? [150 words]

Adjunct instructors will be hired for BGEN 105 Introduction to Business, ACTG 101 Accounting Procedures I, ACTG 180 Payroll Accounting, CAPP 131 Basic MS Office, CAPP 156 MS Excel, and BMGT 245 Customer Service Management. Some of our existing Business, Accounting and Computer adjunct instructors will be used to teach these classes. New adjuncts will be solicited from the advisory board and community contacts. Please see the attached Fiscal Analysis Form for costs.

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? [100 words]

Yes -The Library is staffed to meet business students' needs. Professional advisors, admissions, financial aid and other student and business services already exist and meet the needs of the program's students.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? [150 words]

Yes - Other programs will not be negatively impacted. Existing resources, such as advising, the library staff, and financial aid, have the capacity to absorb the new students brought to Great Falls College through this program.

The implementation of the Office Support program at Great Falls College would enhance and diversify the student make-up within the proposed cross-disciplinary courses making for more robust learning environments.

12. Revenues and expenditures. Describe the implications of the new program on the financial situation of the institution. [100 words]

CURRICULUM PROPOSAL FORM

Costs to start this program are minimal and should be offset by tuition revenue.

a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues	\$23,283	\$54,326	\$54,326
Expenses	\$45,160	\$45,160	\$45,160
Net Income/Deficit (revenues-expenses)	-\$21,877*	\$9,166	\$9,166

*IMPORTANT NOTE: This is a stackable credential within the AAS in Office Management and Supervision. Student count and revenue are separately calculated in these proposals; however, expenditures are duplicative of the AAS expenses. Additional expenditures beyond those listed in AAS are not anticipated because students in both programs will be enrolled in the same set of classes the first year of the AAS and in the certificate.

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? [200 words]

Anticipated student tuition will cover the costs of adjunct instructors. No additional resources for building space, equipment, or classroom materials are anticipated.

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? [150 words]

N/A

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

\$13,010 for adjunct instructors FY2023.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? [150 words]

N/A

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? [150 words]

N/A

CURRICULUM PROPOSAL FORM

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

N/A

14. Complete the fiscal analysis form.

Signature/Date

College or School Dean:

Chief Academic Officer:

Chief Executive Officer:

Flagship Provost*:

— DocuSigned by:

Robert Mokwa

1/28/2022 | 11:39 AM MST

Flagship President*:

DocuSigned by:

*Not applicable to the Community Colleges.

1/28/2022 | 11:39 AM MST

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CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

Fall		
Course Number	Course Description	Credits
BGEN 105	Introduction to Business	3
CAPP 131	Basic MS Office	3
WRIT 121	Intro to Technical Writing	3
M 105	Contemporary Mathematics	3
COMX 115	Interpersonal Communication	<u>3</u>
	Fall Credits	15
Spring		
Course Number	Course Description	Credits
ACTG 101	Accounting Procedures I	3
CAPP 156	MS Excel	3
BMGT 245	Customer Service Management	3
ACTG 180	Payroll Accounting	3
BGEN 215	Career Readiness	2
CAPP 110	Short Courses: MS Outlook	1
	Spring Credits	15
	TOTAL PROGRAM CREDITS	30

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS: Great Falls College Montana State University
AWARD LEVEL: UG

PROGRAM NAME: CAS Office Support

PROGRAM CODE:

		FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
ENROLLMENT P	ROJECTIONS					
Headcount						
annual unduplicated headcount of sor minor within the program	students with declared major	5	10	10	10	10
Credit Hours		1				
annual avg. credits hours earned pe curriculum	r student in program related	20	20	20	20	20
Student FTE						
Undergrad: (Headcount x CH)/30						
Graduate: (Headcount x CH)/24		3	7	7	7	7
·		<u> </u>				
Completions						
A	.		7	-	-	-
Annual number of program comple	ters	3	7	7	7	7
		ļ				
REVEN	UE					
Tuition Revenue (net of waivers)		\$8,535	\$19,914	\$19,914	\$19,914	\$19,914
Institutional Support		\$14,748	\$34,412	\$34,412	\$34,412	\$34,412
Other Outside Funds (grants, gifts, e	etc.)					
Program Tuition/Fees						
Total Rev	renue	\$23,283	\$54,326	\$54,326		\$54,326
Total Revenue pe	r Student FTE	\$7,761	\$7,761	\$7,761	\$7,761	\$7,761
EVDENDI	TUDEC					
EXPENDIT	UKES					
	FTE	0.5	0.5	0.5	0.5	0.5
Tenure Track Faculty	Salary + Benefits	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000
Non-tenure Track Faculty	FTE	0.5	0.5	0.5	0.5	0.5
*Includes Adjunct Instructors	Salary + Benefits	\$13,010	\$13,010	\$13,010	\$13,010	\$13,010
	FTE					
Graduate Teaching Assistants	Salary + Benefits					
C+-#	FTE					
Staff	Salary + Benefits					
Total Faculty 9 Staff	FTE	1.0	1.0	1.0	1.0	1.0
Total Faculty & Staff	Salary + Benefits	\$45,010	\$45,010	\$45,010	\$45,010	\$45,010
0	1-1	1 4.50	44.50	Å	41-0	A
Operations (supplies, travel, rent, etc)		\$150 \$0	\$150	\$150	\$150	\$150
	Start-up Expenses (OTO)		A47.400		A = 4 = 4	.4
Total Exp	enses	\$45,160	\$45,160	\$45,160	\$45,160	\$45,160
Student FTE to Faculty	/ (TT + NTT) Ratio	3.0	7.0	7.0	7.0	7.0
Net Income/Deficit (Re	•	-\$21,877	\$9,166	\$9,166	\$9,166	\$9,166
ivet income/ Dencit (Re	venue - Lypenses)	-321,8//	\$9,166	\$9,166	\$9,166	\$9,166

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.

Campus Chief Financial Officer Signature

Chief Financial Officer Comments

Anticipation of full time and part time students within program, thus difference in headcount vs. FTE calculations.

***IMPORTANT NOTE: This is a stackable credential with AAS in Office Supervision and Management. Student count and revenue are separately calculated, however expenditures are duplicative of AAS expenses. Additional expenditures beyond those listed in AAS are not anticipated.

ITEM 197-2902-R1121 Meeting Date: November 2021

Request for authorization to plan a Certificate of Applied Science in Office Support

Program/Center/Institute Title: Certificate of Applied Science in Office Support Planned 6-digit CIP code: 52.0408

Campus, School/Department: Great Falls College Montana State University Expected Final Submission Date: Dec 2021

Contact Name/Info: Dr. Leanne Frost, Executive Director of Instruction

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit http://mus.edu/che/arsa/academicproposals.asp.

1) Provide a description of the program/center/institute.

As noted in the AY 2021-22 Academic Priorities and Planning Statement, Great Falls College Montana State University plans to offer more programs in the business discipline based on student demand and community need.

The business field provides myriad opportunities for students at all levels of higher education from the certificate to the graduate level. Students prepared with business-specific coursework are able to work in all industries supporting the accounting, finance, management, and marketing functions of an organization.

The Certificate of Applied Science (CAS) in Office Support will provide students with a general background in business designed to prepare graduates for a wide range of entry-level jobs in the public and private sector. The program will consist of a combination of general education and technical coursework in communication, computer application skills, and general business. Students obtaining this certificate will obtain the skills to allow them the opportunity to move into a professional office environment.

This certificate is designed to quickly place students directly in the workforce but could also be used as a stackable credential This CAS degree complements the Office Management and Supervision AAS credential that is also being proposed at this time under a separate request to plan, with all coursework in the CAS applying directly to the first year of the AAS degree. Additionally, while not specifically designed as a stackable credential with a bachelor's degree, students could easily apply the majority of the coursework from the CAS credential to an Associate of Arts transfer degree or a bachelor's degree in several business programs across the state.

This certificate program is designed around a 30-credit curriculum that could be completed in two, full-time (15-credit load) semesters. Students would also be able to complete this certificate with a part-time credit load over a slightly longer timeframe.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).

This degree will prepare students for many occupations in a variety of industries in the business, finance, management, and administrative support fields. Sample job titles may include, but are not limited to, Office Clerks, Administrative Assistants, Receptionists, Schedulers, File Clerks, Patient Representatives, Tellers, and Information Clerks.

Table 1. Projected Annual Openings in Montana for 2018 - 2028

Job Title	Projected Annual Openings 2018 - 2028
Office Clerk (43-9061) *	1,600
Patient Representatives (29-2099) *	730
Administrative Assistants (43-6014) *	650
Receptionists and Information Clerks (43-4171) *	310
File Clerks (43-4071)	50
Other Office and Administrative Support (43-9199)	50

Job titles designated with a * in Table 1 are noted as jobs with a "Bright Outlook" in the O*Net database. Even though the U.S. Bureau of Labor Statistics (BLS, 2021) projects a 3% decline in this sector due to technology, the decline is offset by those leaving the workforce through retirement or normal attrition. There are expected to be a large number of job openings in the next few years.

The BLS notes that employment in business, financial, and management occupations are projected to grow faster than the average for all occupations from 2019 to 2029. This certificate curriculum will include the relevant courses in business, communication, and technology that will allow students to upskill and enter the job market in the business sector as competitive applicants.

The education requirements for the job titles identified in Table 1 include a wide variety of desired education, experience, and skills. This proposed certificate is designed to quickly provide students with the necessary skills that could be substituted for the relevant work experience that employers may desire. This creates a path for people who otherwise might not qualify for office-based positions to enter the professional work environment. The median salaries for some of positions are modest, but these positions typically offer favorable working conditions (i.e. full-time work, day shifts, access to benefits packages) not frequently found in the retail and food-service sectors where potential students for this certificate program might be otherwise employed.

Resources

National Center for O*NET Development. O*NET OnLine. https://www.onetonline.org
U.S. Bureau of Labor Statistics. (2021, April 9). Occupational Outlook Handbook. https://www.bls.gov/ooh/

3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.

This program would be developed and offered with existing faculty in place at the college as part of the current Accounting/Business and General Studies departments. Additional adjunct instructors may be necessary as the enrollments increase. No additional resources for building space, equipment, or classroom materials are anticipated.

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Montana University System REQUEST TO PLAN FORM

4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).

Great Falls College has articulation agreements in place for bachelor's degrees in business disciplines with MSU Billings, MSU Bozeman, MSU Northern, and Montana Tech. While this proposed certificate program is not designed to transfer directly to a bachelor's program, the certificate is a stackable credential. The coursework completed within the certificate could be directly applied to either the proposed associate of applied arts degree in Office Management and Supervision (included as a separate Request to Plan submission) or as one of the articulated associate of arts transfer degrees offered at GFC.

5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.

The 2021-2022 Academic Priorities and Planning Statement outlines GFC's focus on providing quality education to improve students' lives and fill the workforce needs of the local community, region, and state. This proposed certificate program will provide training for traditional students and retraining for non-traditional students to move people from physically-demanding jobs that require shiftwork into a professional atmosphere that often includes benefits and more favorable working conditions. Additional business-related credentials were identified in the Academic Priorities and Planning Statement as an area that would benefit the students at GFC who, like many two-year college students, tend to be older and place bound by families and jobs. Offering this credential at GFC would enhance the current academic offerings and provide new opportunities for the students served by GFC.

Flagship Provost**: Robert Mokwa 9EDD74A82C3A418 PDCs:/Stand by:	Signature/Date	
Flagship Provost**: DocuSigned by: Robert Mokwa 10/1/2021 8:32 AM PDT	StephaneColma	
Flagship Provost**: Color Mokewa 10/1/2021 8:32 AM PDT	Chief Research Officer*:	
Flagship Provost**: Robert Mokewa 9EDD74A82C3A418 Flagship President**: 10/1/2021 8:32 AM PDT 10/1/2021 8:32 AM PDT	Stephaneocolma	
Flagship President**: 10/1/2021 8:32 AM PDT	Flagship Provost**: Robert Mokwa	10/1/2021 8:32 AM PDT
	Flagship President**:	10/1/2021 8:32 AM PDT
*Center/Institute Proposal only	*Center/Institute Proposal only	

**Not applicable to the Community Colleges.

Montana University System REQUEST TO PLAN – OCHE ANALYSIS

ITEM 197-2902-R1121

ITEM NAME: Certificate of Applied Science in Office Support

	1 15 5	oc	HE ANA	LYSIS	E PATE	
		eau of Labor Statistic ree pathway	s report	s the following annual	opening	s for occupations related to
			Pi	ojected Annual Openings 2018 - 2028		
		First-line Supervis Support Workers		ffice and Administrative 1) *	e	450
			`	/lanagers (11-3012) *		20
Labor market outlook		Office Clerk (43-90		, ,		1,600
				entative (43-4051) *		730
		Administrative As				650
				Assistant (43-6011)		70
		Claim Processor (4				60
		New Account Cler	k (43-4	141)		20
Related programs / centers / institutes		•				en the localized nature of ally viewed as warranted.
	LO	NA/		MEDIUM		HIGH
		Only incidental costs	x			substantial commitment of resources relative to institutional budget
Budget Impact	_			g faculty, classrooms, a on program enrollme		ment. Additional adjunct
CAO discussion and follow-up			-			
ARSA/BOR comment and direction for Level						

ACADEMIC PROPOSAL REQUEST FORM

JANUARY/2022

ITEM 2903-LI0122

Notification of the establishment of an A.A. Substance Abuse & Addictions Counseling Emphasis								
Institution:	Great Falls College Montana State Uni	versity CIP Code:	51.1501					
Program/Center/Institute Title:	Associate of Arts Substance Abuse & A	Addictions Counseling Empha	sis					
Includes (please specify below):	Face-to-face Offering: Online Offer	ing: Blended Offering:	<u>X</u>					
Options:								

Natification of the establishment of on A.A. Cubstones Abuse O.Addistions Counseling Frenchesis

Proposal Summary [360 words maximum]

What: Great Falls College Montana State University plans to offer an Associate of Arts in Substance Abuse & Addictions Counseling Emphasis. This credential of 67-68 credits will prepare individuals for entry-level careers in the substance abuse and addictions field.

Why: The state of Montana needs entry-level addictions counselors meeting the educational requirements of the state's Licensed Addiction Counselor (LAC). *The EMSI Occupation Overview: Q1 2021 Data Set* (2021) refers to the northcentral Montana region as a "hotspot" for job demand in the areas of Mental Health and Substance Abuse Social Workers (O-Net Occupation #SOC 21-1029). This program will focus on filling the need for entry level substance abuse counselors and dependence treatment in our region.

This credential:

- Meets the requirements to become a Licensed Addiction Counselor (LAC) in the state of Montana.
- Leads to immediate entry into the workforce upon completion and successful licensure.
- Allows for transfer to a variety of baccalaureate programs with strong opportunities for employment (e.g., the Bachelor
 of Science in Social Work with the University of Montana, the Bachelor of Science in Psychology with Montana State
 University, and the Bachelor of Science in Human Services with Montana State University Billings.

The treatment community is extremely enthusiastic about the development of this program. Great Falls College recruited an eleven-member advisory board that has provided feedback and is overwhelmingly supportive of the program.

Resources: The program is being developed by existing faculty and staff who are appropriately credentialed and licensed. It will be necessary to hire additional adjunct instructors to teach some classes. Great Falls College currently offers General Studies coursework to support the program. The college has existing facilities and student services to meet the needs of the program. There are adequate practicum sites in the community for students to secure the required quota of hours.

ATTACHMENTS

196-2901-R0921_RTP Proposed Curriculum Fiscal Analysis Form

ACADEMIC PROPOSAL REQUEST FORM

Please mark the appropriate type of request and submit with any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit http://mus.edu/che/arsa/academicproposals.asp.

x A. Level I:

	1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form)
	1b. Withdrawing a postsecondary educational program from moratorium
	2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
Х	3. Establishing a B.A.S./A.A./A.S. area of study
	4. Offering an existing postsecondary educational program via distance or online delivery
ЭСНІ	E Approvals
	5. Re-titling an existing postsecondary educational program
	6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
	7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
	8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
	9. Revising a postsecondary educational program (Curriculum Proposal Form)
	10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. L	evel II:
	1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form
	2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)

ACADEMIC PROPOSAL REQUEST FORM

3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11
- -
4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
5. Re-titling an academic, administrative, or research unit

Associate of Arts with an Emphasis in Substance Abuse and Addictions Counseling

Contacts: Dr. Heidi Pasek and Dr. Elfie Neber

This program is offered in a hybrid format – discuss options with your advisor.

The Associate of Arts – Substance Abuse and Addictions Counseling Emphasis prepares individuals for careers in the addictions field. The program is designed to develop the student's skills to provide therapeutic services for people dealing with substance abuse, and with an emphasis on helping them maintain recovery and prevent relapse. Graduates will be prepared for entry into the drug and alcohol counseling profession. By pursuing this emphasis, students complete both a general Associate of Arts degree and the preparatory coursework required to become a licensed addictions counselor.

Outcomes

Graduates are prepared to:

- Apply the diverse theoretical foundations of addiction and substance use to the handson practice in the treatment setting, with a particular focus upon trauma, addiction and substance use disorder for a diverse population.
- Blend theoretical knowledge and applied skills in a variety of settings, including screening, intake, assessment, treatment planning, relapse prevention and case management.
- Engage in the application of a range of models and modalities in the treatment of addiction and substance abuse disorders.
- Acquire foundational knowledge in matters pertaining to legal standards, professional guidelines and ethical issues.

First Semester	Credits
This semester	Cicuit
BIOH 112 Human Form and Function I	4 cr
PSYX 100 Introduction to Psychology	3 cr
PSYX 150 Drugs and Society	3 cr
WRIT 101 College Writing I **	3 cr
CAPP 131 Basic MS Office	<u>3 cr</u>
	16 cr
Second Semester	
CAS 140 Addictions and Diversity	3 cr
CAS 242 Fund Addic Couns*	3 cr
CAS 252 Gamb&GameDisorder-Addictn*	2 cr
CAS 279 Legal, Ethical, Prof Issues SAC*	2 cr
COMX 115 Intro to Interpersonal Commun	c 3 cr
M 105 Contemporary Mathematics ** O	R
STAT 216 Introduction to Statistics**	3-4 cr
1	6-17 cr
Third Semester	
CAS 231 Pharmacology/Addictions	3 cr
CAS 243 Substance Abuse Counseling I*	3 cr
CAS 264 Fund Grp Dyn for Sub Abuse	3 cr
PSYX 240 Fund of Abnormal Psychology	3 cr
CAS 254 Co-Occurring Disorders *	2 cr
Any Fine Arts or Humanities Core Class	<u>3 cr</u>
	17 cr
Fourth Semester	
CAS 248 Substance Abuse Counseling II*	3 cr
CAS 250 Assess and Case Mgmt Processes	
CAS 260 Addiction Assess/Documentation	
CAS 295 Field Work/Clinical/Practicum*	1 cr
Any Fine Arts or Humanities Core Class	3 cr
Any Natural Science w/lab Core Class	<u>4 cr</u>
•	18 cr
Total Credits 6	7-68 cr

- ' Indicates prerequisites needed
- ** Placement in course(s) determined by placement assessment

Academic Degree Program Proposal - Level II Fiscal Analysis Follow-up Form

Great Falls College Montana State University

AWARD LEVEL:

PROGRAM CODE: AA, emphasis in Substance Abuse and Adictions Counseling

		FY2	023	FY2	.024	FY2	025	FY2	026	FY2	2027
		Proj.	Actual OR Revised								
ENROLLMENT	PROJECTIONS										
Headcount											
annual unduplicated headcount of students with declared major or minor within the program		10		15		15		15		15	
Credit Hours								l l			I
annual avg. credits hours earned per student in program related curriculum		24		30		30		30		30	
Student FTE										1	
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24		8		15		15		15		15	
Completions											I
Annual number of program completers		0		7		12		12		12	
REVE	NUE										
Tuition Revenue (net of waivers)		\$22,016		\$41,280		\$41,280		\$41,280		\$41,280	
Institutional Support		\$39,328		\$73,740		\$73,740		\$73,740		\$73,740	
Other Outside Funds (grants, gifts	, etc.)										
Program Tuition/Fees Total Re	ovenue	\$61,344		\$115,020		\$115,020		\$115,020		\$115,020	
Total Revenue p		\$7,668		\$7,668		\$7,668		\$7,668		\$7,668	
EXPEND	ITURES										
	FTE										
Tenure Track Faculty	Salary + Benefits										
Non-tenure Track Faculty	FTE	0.8		1.3		1.3		1.3		1.3	
*Includes Adjunct Instructors	Salary + Benefits	\$20,815		\$33,825		\$33,825		\$33,825		\$33,825	
Graduate Teaching Assistants	FTE Salary + Benefits										
	FTE										
Staff	Salary + Benefits										
Total Faculty & Staff	FTE	0.8		1.3		1.3		1.3		1.3	
Total ruculty & Stan	Salary + Benefits	\$20,815		\$33,825		\$33,825		\$33,825		\$33,825	
Operations (supplies, travel, rent,	etc)										
Start-up Expenses (OTO)											
Total Expenses		\$20,815		\$33,825		\$33,825		\$33,825		\$33,825	
Canada and ETT to Found	A (TT . NITT) Datie	40.7		44.5		44.5		44 -1		44.5	1
Student FTE to Faculty (TT + NTT) Ratio		10.7 \$40,529		11.5 \$81,195		11.5 \$81,195		11.5 \$81,195		11.5 \$81,195	
Net Income/Deficit (Revenue - Expenses)		\$40,529		\$81,195		\$81,195		\$81,195		\$81,195	

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.

Campus Chief Financial Officer Signature

Chief Financial Officer Comments		

January 2022 Academci Item Memorandum 45 of 89

ITEM 196-2901-R0921

Meeting Date September, 2021

Item Name Request for authorization to plan an Associate of Arts Substance Abuse & Addictions Emphasis

Program/Center/Institute Title:

Associate of Arts Substance Abuse &

Addictions Emphasis

Planned 6-digit CIP code: 51.1501

Campus, School/Department:

Great Falls College Montana State University

Expected Final Submission Date: Fall 2021

Contact Name/Info: Dr. Leanne Frost, Executive Director of Instruction

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit http://mus.edu/che/arsa/academicproposals.asp.

1) Provide a description of the program/center/institute.

As noted in the AY 2021-22 Academic Priorities and Planning Statement, Great Falls College Montana State University plans to offer more programs in the areas of the human services and behavioral health based on student demand and dommunity need.

Northcentral Montana is in need of entry level addictions counselors who must meet the educational requirements of the state's Licensed Addictions Counselor (LAC). A thoughtfully designed associate level program could meet the Montana Board of Behavioral Health's criteria as well as provide opportunities leading to other human services credentials. Potentially, the program could be offered as a Certificate of Applied Science (CAS) add-on for licensed professionals seeking the LAC in the state of Montana.

The Associate of Arts Substance Abuse & Addictions Emphasis would prepare individuals for careers in the addictions field. The program would be designed to develop the student's skills to provide therapeutic services for people dealing with substance abuse, with an emphasis on helping them maintain recovery and prevent relapse. Graduates would be prepared for entry into the drug and alcohol counseling profession. In summary, the program would accomplish the following:

- Meet requirements for LAC in the state of Montana
- Lead to immediate entry into the workforce upon completion and successful licensure
- Allow for transfer to a variety of baccalaureate programs with strong opportunities for employment in a variety of entry-level jobs in the human services field

The Montana Department of Labor and Industry LAC Licensure Requirements are located at https://boards.bsd.dli.mt.gov/behavioral-health/license-information/licensed-addiction-counselor.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).

The Emsi Occupation Overview: Q1 2021 Data Set (2021) refers to the northcentral Montana region as a "hotspot" for job demand in the areas of Mental Health and Substance Abuse Social Workers (O-Net Occupation #SOC 21-1029).

Nationally, for a comparable area of our size, there are 1,063 job opportunities. There are currently 1,681 in Northcentral Montana alone. On average, the Montana DPHHS reports 44 job vacancies per year in these areas. This higher than average number of jobs may make it easier for workers in these fields to find employment due to turnover. That means students would not need to leave the community to find good paying jobs with an average salary range of \$31,000 to \$50,000 (EMSI, 2020). Living wage jobs are difficult to find in the Great Falls area.

Table 1. Regional Employment Numbers

Region	2020 Jobs	2031 Jobs	Change	% Change
Montana	1,681	1,927	246	14.6%
National Average	1,063	1,359	296	27.9%
United States	316,479	402,959	86,479	27.3%
Great Falls	126	133	7	5.45%

The COVID-19 pandemic and political unrest acted as a catalyst for many behavioral health challenges. In expectation of a surge in need for behavioral health services, colleges and universities all over the country are creating accelerated programs, particularly in the area of addictions, to meet the current and expected needs (Monroe Community College, 2021).

In addition to jobs created, this program would offer opportunities for people who have lost jobs in certain sectors to upskill or retrain, such as retail and entertainment. The advent of telehealth may provide colleges and universities with a particular opportunity to specialize their programs. Most certainly, new careers and ways of practice in the field will emerge as a matter of necessity in response to COVID-19.

Resources

Emsi. (2021). The Emsi occupation overview: Q1 2021 data set. Retrieved from www.economic modeling.com. HumanServicesEdu.org human services guide. Retrieved from https://www.humanservicesedu.org/what-is-human-services/

Monroe Community College. (2021). With accelerated programs, MCC targets substance abuse, post-COVID job shortages. Retrieved from

https://13wham.com/news/local/mccs-targets-substance-abuse-and-other-post-covid-job-shortages-with-accelerated-programs Utah State University (2021). The rise of mental health technology. *Utah State*. 27 (2), 60-61.

3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.

The program would be developed and offered with existing faculty and staff who are appropriately credentialed and licensed. It may be necessary to hire additional adjunct instructors to support program development and eventually teach in the program itself. General Studies coursework to support the program is currently offered at the college. There are adequate practicum sites in the community for students to secure the required quota of hours.

4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).

In AY 2020-21, GFC MSU created an articulation agreement with UM to offer the 2 + 2 Bachelor in Social Work (BSW) in Great Falls effective Fall 2021. The proposed AA degree would create additional transfer opportunities for students in Northcentral Montana. The proposed program could be an entry point for students leading to behavior science bachelor degrees such as psychology or social work at MSU, MSU-Billings, UM, or UM Western, and builds off of the established BSW articulation.

- 5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.
- GFC MSU's mission is to provide high quality educational experiences supporting student success and meeting the needs of our community. This credential provides access to training and development leading to living wage jobs in our region. As cited above, this program provides individuals with the opportunity to garner a living wage and work in the field of addictions counseling while remaining in the local community. Because of the need in the area, this degree as well as other potential behavioral science credentials were listed in the AY 2021-22 Academic Priorities and Planning Statement.

Signature/Date			
Chief Academic Officer:	Stephanie Endr	na-	
Chief Research Officer*:	MA		
Chief Executive Officer:	Styphanie Enle		
a s			
Flagship Provost**:			
Flagship President**:	S 4		

ACADEMIC PROPOSAL REQUEST FORM

December 2021

ITEM 1501-LII0222

ITEM TITLE Request for autl	horization to establish a Center for Acade	mic Innovation (CAI)
Institution: M C	ontana Technological University	CIP Code:
Program/Center/Institute Title: Ce	enter for Academic Innovation	
Includes (please specify below): F Options:	Face-to-face Offering: Online Offering:	Blended Offering:
	Proposal Summary [360 words i	maximum]
What: Request for authoriza	ation to establish a Center for Academic Inn	novation (CAI)
successful in supporting faculty position did not meet the full rorder for faculty to learn about dedicated to this task. Through Innovation to support excellen best educational/pedagogical	ty who were developing and delivering online corange of instructional support needed by both so and implement best pedagogical practices the hextensive conversations with faculty we developed through modern educational technologies as	and pedagogical practices. This center will support d recommendation, faculty and student training,
	s had a 1.0 FTE position that was the Instruction a fall of 2020, we elected to use the FTE for the	
ATTACHMENTS Academic Request form Center Proposal form Request to Plan form		
following the type of request.	••	materials, including those listed in parentheses of requests listed below, how to complete an item proposals.asp.
A. Level I:		
Campus Approvals		
1a. Placing a post	tsecondary educational program into morator	ium (Program Termination and Moratorium Form)

January 2022 Academci Item Memorandum 49 of 89

ACADEMIC PROPOSAL REQUEST FORM

1b. Withdrawing a postsecondary educational program from moratorium
2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
3. Establishing a B.A.S./A.A./A.S. area of study
4. Offering an existing postsecondary educational program via distance or online delivery
OCHE Approvals
5. Re-titling an existing postsecondary educational program
6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9. Revising a postsecondary educational program (Curriculum Proposal Form)
10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. Level II:
1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Forn
2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11
4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
5. Re-titling an academic, administrative, or research unit

RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

Research Centers and Institutes differ from one another in focus, scope, and staffing, but each contributes in unique ways to the common goals of expanding knowledge, generating new discoveries and/or having a positive impact on society through informing policy and systemic change. Communities of researchers and staff in Research Centers and Institutes provide a stimulating environment that encourages early researchers and challenges experienced researchers. Research Centers and Institutes also contribute to the education and training of the researchers of the future by serving as learning environments for students. Interdisciplinary collaboration is promoted by Research Centers and Institutes both within the Institution and among MUS Institutions. Research Centers and Institutes do not provide didactic coursework, confer academic degrees or academic certificates or require accreditation by external accrediting bodies. Research Centers and Institutes frequently provide a portal for obtaining external funding in response to federal and/or state research priorities. As such, apparent duplication of mission between MUS research centers and institutes is not generally problematic as with academic programs due to the different sources of funding.

1. State the proposed Institute/Center's name and purpose.

Center for Academic Innovation

Purpose: to support excellence through modern educational technologies and pedagogical practices. A combination of research and recommendation, faculty and student training, professional development, and cross-institutional collaboration will foster a culture of excellence in all teaching and learning modalities.

2. A comprehensive statement of the Institute/Center's mission and its relationship to the University mission.

A. State the Institute/Center's mission.

The CAI exists to support the culture of excellence at Montana Technological University by introducing, promoting, and supporting innovative ways to teach and learn. Through professional development, multi-modal training, collaboration, and communication, the CAI will continually and intentionally support the institutional mission.

B. Identify the Institute/Center's goals and objectives.

The overarching goal of the CAI is to foster student success by promoting innovative ways to teach and learn. This goal will be achieved through coordinated faculty development in research-based techniques of instructional design/development and pedagogy, new educational technologies, and collaborative work efforts across campus. For students to succeed in both professional and academic careers, it is imperative that they are taught in ways that reflect current practices in industry, especially at an institution that specialize in technology, where innovation is not the exception, but the rule. Additionally, accrediting bodies of higher education are increasingly requiring assessment data as the focus on student learning outcomes becomes more central. (https://nwccu.org/accreditation/standards-policies/standards/).

C. What specific need is being responded to in developing the proposed Institute/Center?

RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

The move to online during the COVID-19 Pandemic had a number of far-reaching consequences, at least two of which are directly responded to by a CAI. The first, the realization that educational institutions must adapt to a technology-depended standard of operations is exactly what a Center for Academic Innovation is designed for. The second, that the competition for enrolling students is higher than ever while the pool itself is shrinking, makes it imperative that institutions be able to implement best practices along with innovative ideas and techniques. Those that cannot serve students well, will be left behind, so a CAI can be vital for institutional viability.

D. Describe how the Institute/Center benefits the department, college, or institution.

This Center will benefit all academic and academic support units in that its sole purpose is to provide guidance, support, and information on new and innovative ways to teach and support student success. This implies areas that include but expand beyond the classroom (face-to-face and virtual), including accessibility, wellness, community, diversity and inclusion, etc.

E. Describe the Institute/Center's relationship to the University mission.

The mission of Montana's Special Focus Institution, Montana Technological University is to provide "a transformative student experience by developing leaders and advancing science, engineering, and technology, with the purpose of benefiting humanity while meeting the changing needs of society."

A successful Center for Academic Innovation will fully support this mission by providing the educational tools, theories, and practices that develop professional and cultural leaders who not only meet the changing needs of society but make sure those changes benefit society as well.

3. Briefly describe the Institute/Center's anticipated activities.

The Center for Academic Innovation will provide:

- instructional design for courses in all modalities
- materials and assessment design
- quality assurance efforts for all modalities, but especially for online/hybrid, including training, consulting, and internal reviews
- training in best practices in instructional design, pedagogy, andragogy, and effective use of educational technology (especially the LMS), etc.
- support for modern methods of teaching and learning for the whole student, including accessibility, DEI, wellness, etc.
- information and support for multiple methods of adult teaching and learning, including (but not limited to) project-based, outcomes-based, transformative, etc.

A. Identify faculty expertise available for participation in the Institute/Center's activities.

In addition to a Director with instructional design and professional development background and a coordinator of online learning, faculty who are or become adept at online learning and course design will be asked to lend their expertise to department support as peer trainers and peer reviewers.

RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

B. Which departments on campus will be involved and how will the Institute/Center contribute to the academic programs of the institution?

All academic departments will be approached to offer strategically scheduled professional development in areas such as LMS use, favorite technologies, and teaching techniques. Other units that will be involved in offering training include the Office of Accessibility, Advising, the Library, Institutional Research, the Research Office, and Student Affairs.

Memberships to professional organizations such as Quality Matters, Academic Impressions, EDUCAUSE, LinkedIn, and EAB will be coordinated so that faculty can take advantage of available opportunities. Some will be paid for by CAI, some will be maintained outside of the Center, but professional development opportunities will be announced and sometimes hosted by the Center.

4. Identify the organizational structure of the Institute/Center within the institution.

The Center for Academic Innovation will report directly to the Provost.

A. Identify all agencies, organizations and/or institutions that will be involved.

N/A

B. Identify advisory council information.

Advisory council will be comprised of faculty, academic support staff, and students and will advise on challenges, proposed initiatives, and new technologies. This group will also recognize innovative methods of teaching and learning through a showcase sponsored by CAI.

5. Identify first year and continuing finances necessary to support the Center/Institute, including the sources of funding.

The following are being paid out of budgets associated with student online course fees and university operations.

A. Will additional faculty and other resources be required to implement this Center/Institute? If yes, please describe the need and indicate the plan for meeting this need.

Faculty expertise and experience will be leveraged for peer training and peer reviews of courses. Student workers will be used to assist with Zoom meetings and other administrative type work.

B. Are other, additional resources required to ensure the success of the proposed Center/Institute? If yes, please describe the need and indicate the plan for meeting this need.

The current coordinator of online learning is being asked to take instructional design training so she can assist with course design. Faculty are being offered QM training so they can help with peer reviews.

6. Describe other similar Centers/Institutes or research capacities in the state and surrounding region.

N/A

RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

A. Describe the relationship between the proposed Center/Institute and any similar Centers/Institutes, programs, or research capacities within the Montana University System.

As an active part of OCHE's eLearning Advisory Group, the Director has opened a line of communication and collaboration with others with similar interests.

B. In cases of substantial duplication, explain the rationale for the proposed Center/Institute.

N/A

7. Assessment: How will the success of the center/institute be measured?

Success will be measured by the level of participation in professional development opportunities and quality assurance efforts, the adoption and effective use of new technologies and teaching techniques, and of course student retention and success rates (as measured by achievement of learning outcomes).

8. State the internal campus review and approval process which has occurred prior to submission to the Commissioner's Office. Indicate, where appropriate, involvement by faculty, students, community members, professional constituencies, etc.

Prior to creating this center, a focus group of faculty were convened with the charge to determine the best approach for Montana Tech to provide support and professional development for faculty in Teaching and Learning. The focus group recommended that we create a Center for Academic Innovation to meet these needs. It is notable that the creation of this center was a "bottom up" effort that originated with the end users, the faculty, thereby ensuring that it met their needs. The focus group also formed the search committee that identified and selected a person to be the director.

Montana University System REQUEST TO PLAN FORM

ITEM 1503-LII0122 January 2022

Request for authorization to establish a Center for Academic Innovation (CAI)

Program/Center/Institute Title: The Center for Academic Innovation

Planned 6-digit CIP code:

Campus, School/Department: Montana Technological University

Expected Final Submission Date: Dec. 2021

Contact Name/Info: Steve Gammon, sgammon@mtech.edu

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit http://mus.edu/che/arsa/academicproposals.asp.

1) Provide a description of the program/center/institute.

The Center for Academic Innovation (CAI) will support best educational/pedagogical practice on the Montana Tech Campus through a combination of research and recommendation, faculty and student training, professional development, and cross-institutional collaboration to foster a culture of excellence in all teaching and learning modalities.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).

Most institutions of higher education in the US have created centers or offices to support the adoption and development of best instructional practices. Montana Tech has not had this type of support. Because of this, we have not been able to be at the forefront of how to support student learning and success. The move to online during the COVID-19 Pandemic brought to light that we needed to do much more to support our faculty in teaching and learning. The first realization was that in order for Montana Tech to successfully adapt to a technology-depended standard of operations we needed a Center for Academic Innovation. Second, that the competition for enrolling students is higher than ever while the pool itself is shrinking, makes it imperative that institutions implement best practices along with innovative ideas and techniques in teaching and learning. Those that cannot serve students well, will be left behind, so a CAI is critical for institutional viability.

3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.

The support for this Center will be from a previous position that was an instructional designer for online course development. We have facilities (office space) on campus that can support the CAI with no additional investment.

Montana University System

REQUEST TO PLAN FORM

4) Describe any efforts or opportunities you have identified for collaboration either within the institution or

5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing

institutional program array, and academic priorities as described in the most recent Academic Priorities and

between MUS institutions (i.e. articulation, course-sharing, research collaboration).

N/A

Planning Statement.

January 20	O22 Academci Item Memorandum	56 of 89
Center/Institute Pro	pposal only	
lagship Presider	nt**:	
lagship Provost	**.	
hief Executive C	Officer: 1/3/22	
hief Research O	officer*: Carl July 1/6/22	
hief Academic (Officer: 1/3/12	
ignature/Date		
been	creation of this center was not included in the Academic Priorities and Planning statement, but the provost did not realize that the creation of this center would require BOR approal approval process.	
theo	ccessful Center for Academic Innovation will fully support this mission by providing the eries, and practices that develop professional and cultural leaders who not only meet the ciety but make sure those changes benefit society as well.	
trans	nission of Montana's Special Focus Institution, Montana Technological University is to pr formative student experience by developing leaders and advancing science, engineering nology, with the purpose of benefiting humanity while meeting the changing needs of so	g, and

REQUEST TO PLAN FORM

**Not applicable to the Community Colleges.

ACADEMIC PROPOSAL REQUEST FORM

December 2021

ITEM 1502-LI0222

Requesting authorizatio	n to terminate the Geophysics BS degre	ee and consolidate it into an option with the
Geological Engineering E	BS program	
Institution:	Montana Technological University	CIP Code: 14.3901
Program/Center/Institute Title:	Geophysics and Geological Engineering	
Includes (please specify below):	Face-to-face Offering: Online Offering:	Blended Offering:
Options:		
	Proposal Summary [360 w	
What: Terminate the BS in	Geophysics degree and consolidate it into a	an option within the Geological Engineering BS program.
downgraded to a BS Geoph years the enrollment is 8 F can no longer afford to ma	nysics degree. For over a decade, this degree TE students. Also, industrial demand for the intain the full program. There is still a need t via an option in the BS Geological Engineer	ing degree. Starting last year, this degree was has had very low enrollment; for example, the last 2 graduates has not significantly increased. Montana Tech for geophysics curriculum and credentials at Montana ing program. Tech will continue to retain the MS in
faculty. Two of these facult moving to the Electrical En ME departments will be ch	ty exclusively trach service engineering phys gineering department and the other moving	rtment have not been filled. This leaves 4 full-time cics courses. These faculty will be retained with one g to the Mechanical Engineering department. The EE and cs curriculum. The other two faculty will be moved to the
ATTACHMENTS Curriculum Proposal form Termination form Fiscal Analysis form	orm	
Please mark the appropriate following the type of requestions.		tional materials, including those listed in parentheses types of requests listed below, how to complete an item demicproposals.asp.
A. Level I:		
Campus Approvals		

January 2022 Academci Item Memorandum 58 of 89

ACADEMIC PROPOSAL REQUEST FORM

1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form)
1b. Withdrawing a postsecondary educational program from moratorium
2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
3. Establishing a B.A.S./A.A./A.S. area of study
4. Offering an existing postsecondary educational program via distance or online delivery
OCHE Approvals
5. Re-titling an existing postsecondary educational program
6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
7. Consolidating existing postsecondary educational programs (<u>Curriculum Proposal Form</u>)
8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9. Revising a postsecondary educational program (Curriculum Proposal Form)
10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. Level II:
1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Forn
2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11
4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
5. Re-titling an academic, administrative, or research unit

CURRICULUM PROPOSAL FORM

1. Overview of the request and resulting changes. Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. [100 words]

Start a new "Geophysics Option" within the current BS Geological Engineering degree program.

2. Relation to institutional strategic goals. Describe the nature and purpose of the new program in the context of the institution's mission and core themes. [200 words]

Montana Tech's mission is: "As Montana's Special Focus Institution, Montana Technological University provides a transformative student experience by developing leaders and advancing science, engineering, and technology, with the purpose of benefiting humanity while meeting the changing needs of society." Tech has a rich history in serving the natural resources industries. Geophysics clearly supports the institution's mission and historical identity.

3. Process leading to submission. Briefly detail the planning, development, and approval process of the program at the institution. [100 words]

Until 2020, Montana Tech offered a BS Geophysical Engineering degree. Starting 2020, this degree was down-graded to a BS Geophysics degree. For over a decade, this degree has had very low enrollment; for example, the last 2 years the enrollment is 8 FTE students. Also, industrial demand for the graduates has not significantly increased. Montana Tech can no longer afford to maintain a full BS program. There is still a need for geophysics curriculum and credentials at Montana Tech. This need is best met via an option in the BS Geological Engineering program. Tech will continue to retain the MS in Geosciences – Geophysics Option and PhD in Earth Science and Engineering – Geophysics emphasis.

Montana Tech has eliminated the Geophysical Engineering Department. The remaining faculty with Geophysics expertise have been transferred to the Geological Engineering Department which will house the option program.

- **4. Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.
 - a. List the program requirements using the following table.

	Credits
Credits in required courses offered by the department offering the program	55
Credits in required courses offered by other departments	51
Credits in institutional general education curriculum	30
Credits of free electives	0
Total credits required to complete the program	136

CURRICULUM PROPOSAL FORM

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

Outcomes of Students in Geophysics Option within Geological Engineering Major includes:

- (1) Understanding science and engineering background of geophysical methods including seismic, electrical, gravity, magnetic, ground penetrating radar, and/or remote sensing
- (2) Ability to use state-of-art geophysical instruments and computer software for data collection and interpretation
- (3) Communicate effectively among geophysics, geoscience, and engineering communities
- (4) Acquire problem solving skills for geological, geotechnical, hydrogeological, civil, and environmental applications
- **5. Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. [250 words]

Geophysics as a field of science has played a major role in increasing our knowledge of the earth's surface and subsurface properties, physical processes, and resources (water, oil, minerals). Montana Tech is the only university in the Montana University System (MUS) that had a geophysical engineering major before 2020. This program had produced graduates of high quality and almost 100% job placement rate. Industry needs geological engineering students with geophysical background. Civil engineering projects have geotechnical components that need geophysical knowledge and skills. For the next few decades, constructing, mining, petroleum, environmental engineering, natural resources exploration and environmental sustainability need geophysical background. Montana Tech has very special engineering programs that no other institutions in MUS have: Geological Engineering, Mining Engineering, Petroleum Engineering, and Geophysical Engineering (up to 2020). Geophysical methods provide effective and economical tools in characterizing subsurface earth materials and structure for geological engineering applications and locating natural resources. ABET's "Criteria for Accrediting Engineering Programs" specifies that geological engineering curriculum must include "elements of geophysics". Also, the UAS (unmanned aircraft system) Certificate program established recently (2021) at Montana Tech includes a Remote Sensing class as one of the core courses. Restoration and overhaul of geophysics program will continue to serve Montana and the nation in fostering quality geological engineers with strong background in geophysics, assisting Montana Tech's other engineering programs such as mining, petroleum, civil and environmental engineering programs to foster quality engineering graduates. Furthermore, graduates from the Geophysics option will be an important source to maintain Montana Tech's graduate programs. The curriculum proposed for the option also forms the basis for the current MS in Geosciences – Geophysics Option and PhD in Earth Science and Engineering – Geophysics emphasis. Overall, adding a Geophysics Option to the current Geological Engineering program will enhance the program without extra cost.

6. Similar programs. Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title
University	B.S. in	Department of Geosciences

CURRICULUM PROPOSAL FORM

of Montana Missoula	Geosciences: Geology track and climate & environment track	(http://hs.umt.edu/geosciences/undergraduate/programs.php)
Montana State University	Bachelor of Science in Earth Sciences with 5 options: Geography, Geographic Information Science/Planning, Geology, Paleontology, and Snow science	Department of Earth Sciences (https://www.montana.edu/earthsciences/)
University of Montana Western	Bachelor of Science	Environmental Sciences Department (https://www.umwestern.edu/department/environmental-sciences/)

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. [200 words]

Since no other institutions in the Montana University System offer Geophysics degrees/options, there is no duplication.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. [200 words]

Historically, faculty in Montana Tech's Geophysical Engineering Department collaborated with the Department of Earth Sciences of Montana State University (MSU) for graduate thesis research on DOE multidisciplinary projects. This was often because MSU does not have geophysics faculty and geophysical instruments such as seismic equipment, ground penetrating radar, etc. The geophysics faculty regularly collaborated with faculty in other programs at Montana Tech and with faculty at other MUS institutions (UM Missoula, MSU at Bozeman, and MSU Northern) on DOE and NASA projects for undergraduate research, internships, and graduate education, supporting site characterization for environmental and engineering research (NSF-EPSCoR CREWS grant, etc.). They also collaborated with educators and researchers in the region (University of Wyoming and University of Idaho).

7. Implementation of the program. When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. [100 words]

Program will be offered AY22, current students can participate in the program in AY 22. Although the geophysics option will officially be offered starting in AY 22, the classes are already being offered so current students can work toward the option immediately.

CURRICULUM PROPOSAL FORM

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

	Fall Head	count Enr	ollment	1		,	Graduates	5	
AY_22	AY_2023	AY_24	AY_25	AY_26	AY_26	AY27	AY28	AY_29	AY_30_
2	3	4	5	5	2	3	4	5	5

b. Describe the methodology and sources for determining the enrollment and graduation projections above. [200 words]

The historical enrollment in the old BS program was used as the basis for the above projections. Historic enrollment in geophysics varied from 2 to 8, with about 3-5 on average per year. These do not include the 2-4 graduate students per year. A portion of current geological engineering undergraduate students may select this option from among the available options (geotechnical, hydrogeology, mining, and petroleum, and now the proposed geophysics option).

c. What is the initial capacity for the program?

This is an established program that needs to be reconstituted as a geophysics option under the Geological Engineering BS degree program. The program currently has two geophysics faculty (one tenured plus one research faculty), teaching infrastructure (courses developed and software), and over \$1 million in geophysical equipment (3 vehicles for field work education, over \$0.5 million in seismic equipment, over \$0.5 million in electrical and electromagnetic equipment, survey-type GPS units, gravimeters, magnetometers, hyperspectral radiometers, gamma-ray spectrometer, ground penetrating radar, many drones, etc.) that were inherited from the Geophysical Engineering Department. With the current faculty we can manage about 10 undergraduate students a year. The courses also form their basis for a geophysics master degree program.

- **8. Program assessment.** How will success of the program be determined? What action would result if this definition of success is not met? [150 words]
 - a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? [150 words]

The option will be assessed as part of the BS Geological Engineering program.

b. What direct and indirect measures will be used to assess student learning? [100 words]

Job placements, ABET BS program outcomes, ABET BS program objectives. ABET = Accreditation Board for Engineering and Technology. It involves an extensive and continuous program assessment process.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? [100 words]

CURRICULUM PROPOSAL FORM

ABET requires that we demonstrate how the program is maintained and improved via the assessment process.

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. [100 words]

ABET (above).

9. Physical resources.

a. Describe the <u>existing</u> facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? [200 words]

Tech has all the required resources inherited from the old BS Geophysics program. This includes labs and field camp equipment. No new resources are needed.

b. List <u>needed</u> facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? [150 words]

None.

10. Personnel resources.

a. Describe the <u>existing</u> instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? [200 words]

Montana Tech has all the required support and faculty for this option. Certain Geophysics faculty have been transferred to the Geological Engineering Dept.

b. Identify <u>new</u> personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? [150 words]

None.

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? [100 words]

No new resources needed.

CURRICULUM PROPOSAL FORM

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? [150 words]

Yes.

- **12. Revenues and expenditures.** Describe the implications of the new program on the financial situation of the institution. [100 words]
 - a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues	11,414	17,634	23,512
Expenses	11,414	17,634	23,512
Net Income/Deficit revenues-expenses)	0	0	0

- b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? [200 words]
 - i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? [150 words]

Montana Tech has all the required support and faculty for this option. This will have no impact on other programs.

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

None.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? [150 words]

N/A

CURRICULUM PROPOSAL FORM

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? [150 words]

N/A

13.	Student fees.	. If the proposed	program in	ntends to i	mpose new	course,	class, la	ab, o	r program	fees,	please list
	the type and a	amount of the fe	ee.								

None.

14. Complete the fiscal analysis form.

See attached.

Signature/Date

College or School Dean:

Chief Academic Officer:

Chief Executive Officer:

Flagship Provost*:

Flagship President*:

^{*}Not applicable to the Community Colleges.

CURRICULUM PROPOSAL FORM

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? [150 words]
N/A
13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.
None.
14. Complete the fiscal analysis form.
See attached.
Signature/Date
College or School Dean:
DI J. Ttl: 1/1/22
Chief Academic Officer:
Chief Executive Officer:
Flagship Provost*:

Flagship President*:

^{*}Not applicable to the Community Colleges.

CURRICULUM PROPOSAL FORM

CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

Academic Degree Program Proposal - Fiscal Analysis Form

CAMPUS: Montana Technological University
AWARD LEVEL: UG

PROGRAM NAME: Geological Engineering-Geophysics Option

PROGRAM CODE:

ENROLLMENT P		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
ENNOCEMENT	ROJECTIONS					
Headcount						
annual unduplicated headcount of siminor within the program	tudents with declared major or	2	3	4	5	5
Credit Hours						
annual avg. credits hours earned per curriculum	r student in program related	34	34	34	34	34
Student FTE						
Undergrad: (Headcount x CH)/30 Graduate: (Headcount x CH)/24		2.27	3.40	4.53	5.67	5.67
Completions						
Annual number of program completers		2	3	4	5	5
REVEN	UE					
Tuition Revenue (net of waivers) Institutional Support		\$11,414	\$17,634	\$23,512	\$29,390	\$29,390
Other Outside Funds (grants, gifts, e	tc.)					
Program Tuition/Fees						
Total Rev		\$11,414	\$17,634	\$23,512	\$29,390	\$29,390
Total Revenue pe	r Student FTE	\$5,036	\$5,186	\$5,186	\$5,186	\$5,186
EXPENDIT	URES					
Tenure Track Faculty	FTE	0.4	0.4	0.4	0.4	0.4
	Salary + Benefits					
Non-tenure Track Faculty *Includes Adjunct Instructors	FTE Salary + Benefits					
	FTE					
Graduate Teaching Assistants	Salary + Benefits					
Staff	FTE					
Stail	Salary + Benefits					
Total Faculty & Staff	FTE Salary + Benefits					
	out y series					
Operations (supplies, travel, rent, etc)		\$11,414	\$17,634	\$23,512	\$29,390	\$29,390
Start-up Expenses (OTO)		621.424	617.624	622.500	£30,300	630,300
Total Expe	enses	\$11,414	\$17,634	\$23,512	\$29,390	\$29,390
Student FTE to Faculty	(TT + NTT) Ratio	6.0	9.1	12.1	15.1	15.1
Net Income/Deficit (Re		\$0	\$0	\$0	\$0	\$0

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.

Campus Chief Financial Officer Signature

Chief Financial Officer Comments

Montana Tech has all the required support and faculty for this option. Certain Geophysics faculty have already been transferred to the Geological Engineering Dept.

PROGRAM TERMINATION/MORATORIUM FORM

Please complete the following questionnaire prior to submission of a program for termination or placement into moratorium. Please add additional comments beneath each question where applicable.

Pro	ogram Title: BS Geophysics degree			
Pro	ogram is being Placed into moratoriumX Terminated			
1.	Are there currently students enrolled in the program? (If yes, please answer questions a - c below.)	Y:	N:	X
	a.) Have all students currently enrolled in the program been met with and informed of the impending termination/moratorium?	n Y:	N:	
	b.) What is the expected graduation date of all students from the pro-	gram?		
	c.) Have course offerings been planned to allow for students in the program to complete the degree in a reasonable fashion?	Y:	N:	
2.	Will any faculty layoffs or changes in working conditions occur because of the termination/moratorium? (If yes, please answer questions a - b below.)		N:	
	a.) Have the faculty affected by the program termination/moratorium been notified?	n Y: <u>X</u>	N:	
	b.) Please describe any layoffs that will occur including the date expense	cted? n/a		

PROGRAM TERMINATION/MORATORIUM FORM

3.	The following parties, where applicable, have termination/moratorium. (Please mark X fo	
	a.) Internal Curriculum Committees	X
	b.) Faculty Senate	x
	c.) Program Public Advisory Committee	X
	d.) Articulation Partners	x
4.	Has there been any negative feedback recei other constituents regarding the impending	

yes, please explain below.)

ACADEMIC PROPOSAL REQUEST FORM

FEB/2022

ITEM 199-1902

ITEM TITLE Request for	Authorization to Establish a C.A.S	S. in Avionics	Technology
Institution:	Helena College University of Monta	ana	CIP Code: 47.0609
Program/Center/Institute Title:	C.A.S. Avionics Technology		
Includes (please specify below):	Face-to-face Offering: X Online O	Offering:	Blended Offering:
Options:			
	Proposal Summary	[360 words ma	aximum]
the first program ever offer to fighter planes. After 80-with the addition of an aviaddition of this program a avionics, there is a true necompleting two industry re(National Center for Aircra Why: This program serves Maintenance Technology; working in the industry. The mission by providing our serves results in the most highly to community.	ered by Helena College in 1939 in rest + years of offering this program, Hel- ionics certificate program. We have s we have repeatedly heard from outed for increased training in this area ecognized credentials offered by the aft Technician Training). s a dual purpose as it is intended to be but could also be a valued profession his is a high skill, high wage, opportunity, we	sponse to needed lena College cordone our due dur advisory boarda. Students rece e FCC (Federal Conal developme unity for individuating the highest	Avionics Technology. Aircraft maintenance was ed mechanics for WWII aircraft from helicopters nationally to be dedicated to serving this industry diligence to research and prepare for the rot that with the growing complexity of aircraft eiving this credential will also have the option of communications Commission) and the NCATT credential to our existing AAS degree in Aviation ent opportunity for aviation mechanics currently luals in this field; and fulfills the Helena College t quality education in the region. This in turn strengthen the workforce and build our
Resources:			
ATTACHMENTS 199-1902-R0322_Curr	r, 199-1902-R0322_Fisc, 196-1902-R0)921_RTP	
following the type of reque		to the types of	aterials, including those listed in parentheses requests listed below, how to complete an item oposals.asp.
A. Level I:			

ACADEMIC PROPOSAL REQUEST FORM

Campus Approvals

1a. Placing a postsecondary educational program into moratorium (Program Termination and Moratorium Form)
1b. Withdrawing a postsecondary educational program from moratorium
2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less
3. Establishing a B.A.S./A.A./A.S. area of study
4. Offering an existing postsecondary educational program via distance or online delivery
OCHE Approvals
5. Re-titling an existing postsecondary educational program
6. Terminating an existing postsecondary educational program (Program Termination and Moratorium Form)
7. Consolidating existing postsecondary educational programs (Curriculum Proposal Form)
8. Establishing a new minor where there is a major or an option in a major (Curriculum Proposal Form)
9. Revising a postsecondary educational program (Curriculum Proposal Form)
10. Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
B. Level II:
1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Request to Plan Form
2. Permanent authorization for a temporary C.A.S. or A.A.S degree program (Curriculum Proposal and Completed Request to Plan Form)
3. Exceeding the 120-credit maximum for baccalaureate degrees Exception to policy 301.11
4. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and completed Request to Plan, except when eliminating or consolidating)
5. Re-titling an academic, administrative, or research unit

CURRICULUM PROPOSAL FORM

1. Overview of the request and resulting changes. Provide a one-paragraph description of the proposed program. Will this program be related or tied to other programs on campus? Describe any changes to existing program(s) that this program will replace or modify. [100 words]

Helena College is requesting a Certificate of Applied Science in Avionics Technology. This program will be a stackable credential to the existing Associate of Applied Science in Aviation Maintenance Technology which is currently offered by Helena College. This certificate will be an additional credential for Helena College students and/or will also be a professional advancement opportunity for current industry Airframe and Powerplant technicians who wish to upskill their abilities in aircraft electronics/avionics. This program will serve to strengthen and build workforce development in the aviation industry locally and statewide.

2. Relation to institutional strategic goals. Describe the nature and purpose of the new program in the context of the institution's mission and core themes. [200 words]

The purpose adding an avionics certificate is multifaceted. The Helena College Aviation Maintenance Advisory Board has expressed a need for this training for the past two years during our advisory board meetings. Helena College has been responsive in providing the addition of this credential. This credential will better prepare these students and support workforce demands in Montana and nationwide. These students will be the most desirable and qualified candidates for employment providing a highly trained graduate with multiple industry recognized credentials. This credential may also benefit those who are already in the industry by providing additional training needed for this industry which is becoming increasingly more electronic and technologically advanced. The mission of Helena College is to be a comprehensive two-year college that provides access to and support of high quality lifelong educational opportunities for our diverse community; and the addition of the CAS in Avionics Technology fulfills the Helena College mission by providing a necessary need at an affordable cost to our diverse community of students and community members.

Helena College has specialized in Aviation since 1939 and in listening to our advisory board we are adding this credential which in turn supports our core themes by providing access to high quality education as well as providing an additional training opportunity to our community for those already in this profession.

3. Process leading to submission. Briefly detail the planning, development, and approval process of the program at the institution. [100 words]

Helena College took all of the appropriate steps and very thoughtfully moved forward with the proposal of this program. As stated above, this was a suggestion by our Aviation Maintenance Advisory Board which prompted research into this credential. After thorough research of industry demand and labor market data, Helena College is proposing a Certificate of Applied Science in avionics which can be a standalone credential; but will in most cases be an additional credential to those who have an Airframe and/or Powerplant (A&P) license as this is the gold standard for industry requirements. Helena College put this forward on the academic proposals request for 2021-2022 and proceeded with a request to plan document that was approved September 22, 2021. Since that time, the Director of CTE has had multiple conversations with industry partners statewide, other institutions who offer this credential, and has also made a site visit to Everett Community College in Washington and is working with Clover Park Technical College also in Washington. All of these conversations have resulted in sound research to support the development of the highest quality and most appropriate program for our local, regional, statewide, and national workforce.

CURRICULUM PROPOSAL FORM

- **4. Program description.** Please include a complete listing of the proposed new curriculum in Appendix A of this document.
 - a. List the program requirements using the following table.

List the program requirements using the ronowing tuble.	ı
	Credits
Credits in required courses offered by the department offering the program	35
Credits in required courses offered by other departments	0
Credits in institutional general education curriculum	8
Credits of free electives	0
Total credits required to complete the program	

b. List the program learning outcomes for the proposed program. Use learner-centered statements that indicate what students will know, be able to do, and/or value or appreciate as a result of completing the program.

Upon successful completion of this program students will:

- 1. Have an in-depth knowledge of aviation/aerospace electrical and electronic systems.
- 2. Perform annual maintenance and necessary repairs on aircraft electrical systems.
- 3. Safely install, test, troubleshoot, and repair all electrical and electronic communication systems, navigation systems, and control systems.
- 4. Be prepared to sit for industry recognized credentials from the FCC (Federal Communications Commission and the NCATT (National Center for Aircraft Technician Training).
- 5. Interpret applicable FAA and FCC regulations, aircraft service records, original equipment manufacturer technical manuals, schematics, and directives.
- **5. Need for the program.** To what specific student, regional, and statewide needs is the institution responding to with the proposed program? How will the proposed program meet those needs? Consider workforce, student, economic, societal, and transfer needs in your response as appropriate. [250 words]

As stated above, the Helena College Aviation Maintenance Technology Advisory Board has specifically requested Helena College to add training in the field of avionics. Modern aircraft communication and navigation systems are becoming increasingly more complex due to the addition of more electrical and electronic components which is not covered in the necessary depth in the current Aviation Maintenance Technology curriculum (1900 hours as dictated by the FAA). In discussions with other statewide aircraft industry partners, the need for this credential is highly desirable and Helena College has received positive feedback that this credential, in addition to the Airframe and Powerplant license would increase employment opportunities for students.

According to the Bureau of Labor Statistics there are currently 60 jobs for Avionics Technicians in the State of Montana with a mean wage of \$50,630 (https://www.bls.gov/oes/current/oes_mt.htm#53-0000 . Please see additional statistics below to support the need for this program.

CURRICULUM PROPOSAL FORM

Display All \	Display All ✓ records Text search table: 49								1	
Occupation code	Occupation title (click on the occupation title to view its profile)	\$ Level	Employment	Employment RSE	Employment per 1,000 jobs	Location quotient	Median hourly wage	Mean hourly wage	Annual mean wage	Mean wage RSE
49-2091	<u>Avionics</u> <u>Technicians</u>	detail	70	49.6%	0.145	0.94	\$24.49	\$24.34	\$50,630	3.0%

According to the Occupational Outlook Handbook, also published by the US Bureau of Labor Statistics, there is faster than average growth in this occupational area (see below copied from https://www.bls.gov/ooh/installation-maintenance-and-repair/aircraft-and-avionics-equipment-mechanics-and-technicians.htm)

Quick Facts: Aircraft and Avionics Equipment Mechanics and Technicians					
2020 Median Pay	\$66,680 per year \$32.06 per hour				
Typical Entry-Level Education	See How to Become One				
Work Experience in a Related Occupation	None				
On-the-job Training	None				
Number of Jobs, 2019	160,000				
<u>Job Outlook, 2019-29</u>	5% (Faster than average)				
Employment Change, 2019-29	7,300				

Many of our students also come from out of state so national statistics also provided by the Bureau of Labor Statistics have also been included to demonstrate the need for this profession not only in Montana but also nationally https://www.bls.gov/oes/2019/may/oes492091.htm

National estimates for Avionics Technicians: Top

Employment estimate and mean wage estimates for Avionics Technicians:

Employment (1) RSE (3)		Mean hourly wage	Mean annual wage <u>(2)</u>	Wage RSE (3)	
21,390	6.7 %	\$ 33.26	\$ 69,180	1.7 %	

Percentile wage estimates for Avionics Technicians:

CURRICULUM PROPOSAL FORM

Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	\$ 20.03	\$ 26.50	\$ 32.61	\$ 40.33	\$ 48.41
Annual Wage (2)	\$ 41,660	\$ 55,120	\$ 67,840	\$ 83,880	\$ 100,680

6. Similar programs. Use the table below to identify and describe the relationship between any similar programs within the Montana University System.

Institution Name	Degree	Program Title
Gallatin College AAS		AAS Aviation Electronics Technology

a. If the proposed program substantially duplicates another program offered in the Montana University System, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. [200 words]

After the Helena College CAS in Avionics was approved, Gallatin College proposed a temporary establishment of an Associate of Applied Science in Aviation Electronics Technology. As noted in their request, "This 62-credit program will teach students the theoretical and technical applications of aviation electronics (avionics) within the aviation/aerospace industry. Through hands-on training with aircraft electronics students will test, troubleshoot, and repair components for communication, navigation, instruments, and control systems. Successful program graduates will be prepared to earn industry recognized certifications and work as entry level technicians in the aircraft electronics maintenance and repair field or similar electronics-system industries." The program outcomes do appear at this time to be very similar; however, as this program is not yet formalized, it is difficult to determine how duplicative this program will be to the Helena College program. Representatives from MSU Bozeman and Gallatin College have stated that their program will be substantially different but they have not shared their curriculum plan at this time. The Helena College program is focused on providing students with a stackable credential to the AAS in Aviation Maintenance Technology resulting in a higher level and more broad industry preparedness while also providing the industry recognized credentials by the FCC and NCATT. The representatives from Gallatin College have implied that their program will be serving a very specific local industry need. The Office of the Commission of Higher Education has been involved in the approval of both of these programs and has stated they will monitor both programs progress and success.

b. Describe any efforts that were made to collaborate with similar programs at other institutions. If no efforts were made, please explain why. [200 words]

As mentioned above, discussions were held between the OCHE, Gallatin College and Helena College to address the duplicative nature of these two programs. Conversations will continue as these programs are implemented.

CURRICULUM PROPOSAL FORM

7. Implementation of the program. When will the program be first offered? If implementation will occur in phases, please describe the phased implementation plans. [100 words]

Pending Level II approval, this program will begin Summer 2022 and will be offered yearly.

a. Complete the following table indicating the projected enrollments in and graduates from the proposed program.

Summer Headcount Enrollment						Graduates			
AY_22	AY_23	AY_24	AY_25	AY_26	AY_22_	AY_23	AY_24	AY25_	AY_26
8	15	15	20	20	8	15	15	20	20

b. Describe the methodology and sources for determining the enrollment and graduation projections above. [200 words]

Helena College is projecting that 75% of the AAS program graduates will enroll in the avionics program for the additional credential. The remainder of the seats will be filled with industry participants. Maximum enrollment will be 20 seats per program offering.

- c. What is the initial capacity for the program?
 Initial capacity for this program will be 15 students with an expectation of 8-10 students. Maximum enrollment of 20 students.
- **8. Program assessment.** How will success of the program be determined? What action would result if this definition of success is not met? [150 words]
 - a. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program. When will assessment activities occur and at what frequency? [150 words]

Helena College has a detailed assessment database that is used to evaluation completion of learning outcomes, completion of program outcomes, and the relationship to institutional goals. This system will be used to carefully evaluate student success and program sustainability. Retention and enrollment measures will be collected and the goal will be to retain and complete at least 80% of these students. An external success measure will be those students who will successfully obtain industry recognized credentials from the FCC and NCATT.

b. What direct and indirect measures will be used to assess student learning? [100 words]

Direct measures will be enrollment, retention and completion numbers as well as completion of course and program outcomes. Indirect measures will be those who obtain industry recognized credentials post-graduation as well as percent of those employed in the industry within six months and within one year.

c. How will you ensure that the assessment findings will be used to ensure the quality of the program? [100 words]

As mentioned above, Helena College has an excellent database as well as institutional research department that will be used to assess and review data.

CURRICULUM PROPOSAL FORM

d. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation. [100 words]

The Helena College Aviation Maintenance Program is already approved and overseen by the Federal Aviation Administration. The avionics certificate does not fall under FAA regulations; however, it has been noted by industry professionals that avionics technicians are typically overseen by an individual holding an Airframe and/or Powerplant license or they already carry and Airframe and/or Powerplant license. If a person were to take this curriculum outside of the AAS program, they are required to get a repairman's certificate with their specific place of employment that is not transferable if they leave that place of employment.

9. Physical resources.

a. Describe the <u>existing</u> facilities, equipment, space, laboratory instruments, computer(s), or other physical equipment available to support the successful implementation of the program. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated? [200 words]

This program requires avionics training aids/lab, live aircraft, airframe lab, and classroom. Due to the fact that Helena College already offers the aviation maintenance program there will be minimal additional facility/equipment needs to add avionics. The impact on the existing program will be minimal as the additional avionics curriculum will be offered during the summer semester so there will be classroom and lab areas available.

b. List <u>needed</u> facilities, equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. (Enter the costs of those physical resources into the budget sheet.) How will the need for these additional resources be met? [150 words]

The primary need for this program will include avionics electrical boards and simulators. Helena College is currently in the process of working through the procurement process and with various vendors to make these purchases. The estimated cost of new equipment will be approximately \$50,000. These purchases will be supported by our academic equipment fund as well as the Perkins grant.

10. Personnel resources.

a. Describe the <u>existing</u> instructional, support, and administrative resources available to support the successful implementation of the program. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained? [200 words]

Helena College currently has two full-time and one adjunct aviation faculty. None of these faculty have a specific concentration in avionics; however, they will be teaching the current coursework that will be part of the avionics certificate already included in the general and airframe curriculum that currently exists. The courses that will be added specifically for avionics will be taught by an adjunct who specializes in avionics during the summer semester.

b. Identify <u>new</u> personnel that must be hired to support the proposed program. (Enter the costs of those personnel resources into the budget sheet.) What are the anticipated sources or plans to secure the needed qualified faculty and staff? [150 words]

CURRICULUM PROPOSAL FORM

One additional adjunct instructor will be hired (or multiple if necessary) to teach the summer credits in avionics. This cost will be approximately \$15,000 (16 hours x\$650/credit plus worker's comp. etc.)

11. Other resources.

a. Are the available library and information resources adequate for the proposed program? If not, how will adequate resources be obtained? [100 words]

Yes all necessary information for this program can be found in our current library or online via our library databases.

b. Do existing student services have the capacity to accommodate the proposed program? What are the implications of the new program on services for the rest of the student body? [150 words]

Due to the fact that the majority of students will be taking this as an additional credential during the summer semester, there should be minimal impact on existing student services operations and no impact on the rest of the student body.

- **12. Revenues and expenditures.** Describe the implications of the new program on the financial situation of the institution. [100 words]
 - a. Please complete the following table of budget projections using the corresponding information from the fiscal analysis form for the first three years of operation of the new program.

	Year 1	Year 2	Year 3
Revenues	\$92,280	\$173,025	\$173,025
Expenses	\$63,455	\$51,750	\$51,750
Net Income/Deficit (revenues-expenses)	\$28,825	\$121,275	\$121,275

b. Describe any expenses anticipated with the implementation of the new program. How will these expenses be met? [200 words]

The primary expense that will occur as a result of the addition of this CAS in avionics is purchase of avionics training equipment/simulators and adjunct budget for instructors. It is estimated that the equipment cost will be approximately \$50,000 and our current plan is to use our equipment fee pot as well as Perkins funding for this equipment. The adjunct budget will be 16 credit hours (x \$650/credit) which is \$10,400 plus additional fees for Worker's Compensation etc. so approximately \$15,000 which may also be taken from Perkins or may be found in the current instructor budget as we do have some unfilled positions. The total cost of the addition of this program should be less than \$100,000. If the program is successful, rather than having multiple adjuncts we may add a full-time tenure track faculty for this certificate program.

i. If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs? [150 words]

CURRICULUM PROPOSAL FORM

At this time it is not felt that there will be a reallocation of any existing funding.

ii. If an increase in base funding is required to fund the program, indicate the amount of additional base funding and the fiscal year when the institution plans to include the base funding in the department's budget.

There should be no additional base funding required for this program at this time. We may consider adding a full-time tenure track position for this program in the future depending on the demand for this program.

iii. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends? [150 words]

A portion of the funding for the startup of this program will be from the Perkins grant for equipment costs. Course fees will be added to these courses to assist with equipment replacement in the future.

iv. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds? [150 words]

If Perkins funding is needed to support this program, this funding will be used initially for the purchase of equipment and may be used to fund instructor wages the first year and then second year and then be taken over by the college the third year.

13. Student fees. If the proposed program intends to impose new course, class, lab, or program fees, please list the type and amount of the fee.

Total additional student fees for this program will be \$105 divided between five courses.

14. Complete the fiscal analysis form. – See attached

Signature/Date

College or School Dean:

Chief Academic Officer: Sanda Bar
Chief Executive Officer: Sanda Bar

CURRICULUM PROPOSAL FORM

Flagship Provost*: N/A

Flagship President*: N/A

*Not applicable to the Community Colleges.

CURRICULUM PROPOSAL FORM

Appendix A – Proposed New Curriculum

		 	<u></u>			
			T			
REVEN	IUE					
Tuition Revenue (net of waivers)			T		\$91,440	\$171,450
Institutional Support					331,440	3171,430
Other Outside Funds (grants, gifts, e	etc.)					
Program Tuition/Fees	,				\$840	\$1,575
Total Rev	venue	\$0	\$0	\$0	\$92,280	\$173,025
Total Revenue pe	er Student FTE	#DIV/0!	#DIV/0!	#DIV/0!	\$6,921	\$6,921
EXPENDIT	TURES					
Tenure Track Faculty	FTE					
-	Salary + Benefits					
Non-tenure Track Faculty	FTE				11700.0	50000.0
*Includes Adjunct Instructors	Salary + Benefits FTE				\$1,755	\$1,750
Graduate Teaching Assistants	Salary + Benefits					
o. #	FTE					
Staff	Salary + Benefits					
Total Faculty & Staff	FTE				1.0	1.0
	Salary + Benefits				\$13,455	\$51,750
0	1		1			
Operations (supplies, travel, rent, et Start-up Expenses (OTO)	LC)		+		\$50,000	
Total Exp	enses	\$0	\$0	\$0	\$63,455	\$51,750
Total Exp		- 70			- 	
Student FTE to Facult	y (TT + NTT) Ratio	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0
Net Income/Deficit (Re	wonue Evnences)	\$0	\$0	\$0	\$28,825	\$121,275

The signature of the campus Chief Financial Officer signifies that he/she has reviewed and assessed the fiscal soundness of the proposal and provided his/her recommendations to the Chief Academic Officer as necessary.

Campus Chief Financial Officer Signature

Chief Financial Officer Comments

This program is cost effective because we are leveraging our facilities equipment and personnel in the Aviation Maintenance Program.

REQUEST TO PLAN FORM

ITEM 196-1902-R0921_RTP Meeting Date: Sept. 15-16, 2021

Item Name: Request for authorization to plan a Certificate of Applied Science in Avionics

Program/Center/Institute Title: Helena College University of Montana Planned 6-digit CIP code: 47.0609

Campus, School/Department: Career and Technical Education/Trades Expected Final Submission Date:

Contact Name/Info: Tammy Burke Executive Director of CTE/Sandra Bauman Dean/CEO

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit http://mus.edu/che/arsa/academicproposals.asp.

1) Provide a description of the program/center/institute.

Helena College is requesting to plan for a Certificate of Applied Science in Avionics Technology. This will be either a standalone CAS (for new students or current aviation mechanics) or could be a stackable credential in addition to the current Aviation Maintenance Technology Program. This program will include 30 credits of aviation courses, avionics specific courses, and required related instruction courses. This can be a standalone credential which leads to gainful employment or could be combined as an additional credential for aviation mechanics.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).

The Aviation Maintenance Technology Program has been offered by Helena College since 1939. This program is governed by an advisory board of industry partners and over the past several years, the advisory council has repeatedly expressed the need for additional training in the area of avionics. This in combination with local, area, and national statistics that support a workforce demand for this profession have led Helena College to pursue the addition of this program. According to the Bureau of Labor Statistics there are currently 60 jobs for Avionics Technicians in the State of Montana with a mean wage of \$49,000 (https://www.bls.gov/oes/2019/may/oes_mt.htm#(8)). According to the Occupational Outlook Handbook, also published by the US Bureau of Labor Statistics, there is faster than average growth in this occupational area (see below copied from https://www.bls.gov/ooh/installation-maintenance-and-repair/aircraft-and-avionics-equipment-mechanics-and-technicians.htm)

Quick Facts: Aircraft and Avionics Equipment Mechanics and Technicians					
2020 Median Pay \$66,680 per year \$32.06 per hour					
Typical Entry-Level Education	See How to Become One				

REQUEST TO PLAN FORM

Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2019	160,000
Job Outlook, 2019-29	5% (Faster than average)
Employment Change, 2019-29	7,300

Many of our students also come from out of state so national statistics also provided by the Bureau of Labor Statistics have also been included to demonstrate the need for this profession not only in Montana but also nationally https://www.bls.gov/oes/2019/may/oes492091.htm

National estimates for Avionics Technicians: Top

Employment estimate and mean wage estimates for Avionics Technicians:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage <u>(2)</u>	Wage RSE (3)
21,390	6.7 %	\$ 33.26	\$ 69,180	1.7 %

Percentile wage estimates for Avionics Technicians:

Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	\$ 20.03	\$ 26.50	\$ 32.61	\$ 40.33	\$ 48.41
Annual Wage (2)	\$ 41,660	\$ 55,120	\$ 67,840	\$ 83,880	\$ 100,680

Industry profile for Avionics Technicians: Top

Industries with the highest published employment and wages for Avionics Technicians are provided. For a list of all industries with employment in Avionics Technicians, see the <u>Create Customized Tables</u> function.

Industries with the highest levels of employment in Avionics Technicians:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Aerospace Product and Parts Manufacturing	8,030	1.53	\$ 37.22	\$ 77,420

REQUEST TO PLAN FORM

Support Activities for Air Transportation	6,180	2.98	\$ 27.53	\$ 57,260
Federal Executive Branch (OEWS Designation)	1,440	0.07	\$ 30.20	\$ 62,820
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	1,160	0.28	\$ 32.09	\$ 66,750
Architectural, Engineering, and Related Services	780	0.05	\$ 38.06	\$ 79,170

49- 2091	Avionics Technicians	detail	60	33.3%	0.129	0.87	\$23.84	\$23.56	\$49,000	2.6%

3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.

In light of the fact that Helena College already offers an aviation maintenance program there is adequate classroom and lab space to offer this program. Additional avionics equipment would potentially be necessary, but an inventory of current resources would have to be thoroughly reviewed prior to being able to provide an exact amount of needed equipment. Due to this being a new program however, it is felt that Perkins funding could be used to support equipment purchases as well as any curriculum development. In the long-term, adjunct faculty would be needed to instruct the avionics specific courses but this would not require a full-time tenure track position.

4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).

There are currently no other existing aviation maintenance programs in the State of Montana and therefore this is not a competitive program for any of the other existing MUS institutions.

5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.

This program fits with the mission of Helena College and the strategic plan in a variety of ways. Because this is a very specialized program, it offers opportunities to local, regional, state, and national students which aligns with our goal to make education accessible. Due to our low cost of attendance, this allows

January 2022

Academci Item Memorandum

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REQUEST TO PLAN FORM

a diverse population of students affordable education which leads to a high wage high skill employment. Finally, this program may be very attractive to the current workforce of aviation mechanics who are seeking additional training in the area of avionics to upskill the workforce.

Signature/Date	
Chief Academic Officer:	
Chief Research Officer*:	
Chief Executive Officer:	
Flagship Provost**:	
Flagship President**:	
*Center/Institute Proposal only **Not applicable to the Community Colleges.	