A MEMORANDUM

DATE:	October 5, 2020
TO:	UCCC Members
FROM:	Dr. Dana Pomykal Franz, Chair
SUBJECT:	October 16, 2020 Meeting

The agenda and proposals for the meeting on **Friday**, **October 16**, **2020 beginning at 1:30 p.m.** are enclosed. The meeting will be held by WebEx. Please contact the UCCC Office if you are unable to participate.

The minutes from the September 4, 2020 UCCC meeting are included in the meeting packet. The link for WebEx will be sent to you in a separate email.

Thank you.

Enclosures: Course/Curriculum Proposals

AGENDA UNIVERSITY COMMITTEE ON COURSES AND CURRICULA October 16, 2020

- 1. Welcome
- 2. Approval of minutes
- 3. Course proposals by college/school

AGRICULTURE AND LIFE SCIENCES

Addition	<u>ADS 3003</u>	Performance Horse Training and Preparation for Sale			
Modification +Online/Distance	<u>ADS 3313</u>	Introduction to Meat Science			
Modification +Online/Distance	<u>AELC 3503</u>	Internship in Agricultural Science and Leadership			
+Online/Distance	FDM 4603/6603	Global Sourcing in the Textile and Apparel Industry			
Modification +Online/Distance	<u>FNH 3313</u>	Introduction to Meat Science			

ART AND SCIENCES

Addition	<u>GS 4413</u> /6413	4413/6413 Sociology of Gender and Sexuality				
Addition	<u>GS 4503</u> /6503	Gender and Work				
Addition	tion PSY 4233/6233 Culture and Psychology					
+Online/Distance						
Addition PSY 8013 Reading Seminar in Clinical Psychological Science		Reading Seminar in Clinical Psychological Science II				

BUSINESS

+Online/Distance	<u>MKT 3933</u>	International Marketing
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EDUCATION

Modification +Online/Distance	<u>EP 4123</u>	Aging and Physical Activity
+Online/Distance	<u>EPY 8263</u>	Psychological Testing in Educational and Related Settings
Addition	<u>MU 3103</u>	Music of Native America

ENGINEERING

Addition +Online/Distance +Gulf Coast	<u>EM 4353</u> /6353	Combustion Theory and Modeling
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FOREST RESOURCES

Addition	FO 8333	Silviculture for Multiple Ecosystem Services
+Online/Distance		1 7

VETERINARY SCIENCE

Addition	<u>CVM 5242</u>	Small Animal Dermatology
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4. Degree proposals by college/school

AGRICULTURE AND LIFE SCIENCES

Renaming & BS Environmental Economics and Management to Environm		Environmental Economics and Management to Environmental
Modification		Economics and Sustainability (Tabled at Sept. 4, 2020 meeting)

ARCHITECTURE, ART AND DESIGN

Addition	Certificate	Historic Preservation	

ENGINEERING

A	Addition	Minor	Petroleum Engineering	

University Committee on Courses and Curricula Mississippi State University September 4, 2020

Members

- Present: Tracey Baham, Anna Bales, Randy Campbell, Russell Carr, Padmanava Dash, Brian Davis, Tyler Dickerson, Nathan Drake, Dana Franz, Julie Jessop, Caroline Kobia, Pat Mattes, Qingmin Meng, Cate Mocal-King, Rob Moore, Emily Owen, Tommy Parker, Ira Parson, Andy Perkins, Suzanne Powney, Matthew Priddy, Wendy Roussin, Emily Shaw, Kathy Sherman-Morris, Darrell Sparks, Barry Stewart, Marian Swindell, Brad Trinkle, Jenny Turner, Jeff Winger, Chien Yu
- Excused: Brian Baldwin, Kathy Dooley, Trey Howell
- Guests: Kylie Forsythe, Lynda Moore

The September 4, 2020 meeting was conducted using WebEx connective technology due to the coronavirus.

Franz called the meeting to order at 1:30 p.m. on Friday, September 4, 2020. The meeting was conducted using WebEx connective technology. Franz announced that she is meeting with Brent Fountain, Associate Vice President for Academic Affairs, about the 2020 Winter Session.

Trinkle moved to approve the minutes from the July 31, 2020 UCCC meeting. Priddy seconded the motion. The motion was approved.

Carr moved to approve the modification of EN 4903 Nineteenth-Century American Literature. R. Moore seconded the motion. UCCC members discussed how the prerequisite was written. The motion was approved.

Carr moved to approve the addition of FLG 6593 Contemporary German Literature and the addition of distance education to FLG 6593. Priddy seconded the motion. The subcommittee that reviewed the proposal questioned whether additional prerequisites are needed for this course; whether distance education work will be posted on Canvas and if so, that information needs to be in the syllabus; and whether the course should be made available for Campus 1 students. Trinkle moved to pass the proposal contingent upon the above concerns being addressed. R. Moore seconded the motion. The motion to pass contingent was approved.

Carr moved to approve the addition of GE 2011 Engineering Recruitment Leadership Seminar. Priddy seconded the motion. UCCC members discussed the grading scale. The motion was approved.

Carr moved to approve the modification of WFA 3133 Applied Ecology. Priddy seconded the motion. The motion was approved.

Roussin moved to approve the renaming of the BS in Environmental Economics and Management. Trinkle seconded the motion. UCCC members were concerned that the only courses related to environmental science are BIO 3104 Ecology and WFA 3133 Applied Aquatic & Terrestrial Ecology. UCCC members pointed out there are no sustainability classes such as ENS 2103 Environmental Sciences and PSS 4153/6153 Sustainable Agroecology in the degree and felt the use of the word "sustainability" may not be supported adequately in the proposal. Carr moved to table the motion. Stewart seconded the motion to table. The motion to table was approved.

Roussin moved to approve the addition of a minor in Landscape Architecture. Trinkle seconded the motion. UCCC members were concerned there was not much information in the student learning outcomes and assessment section of the proposal. UCCC members were also concerned that a student could obtain the minor by taking only 1000 level courses. Trinkle moved to pass the motion contingent upon the above concerns being addressed. Powney seconded the motion. The motion to pass contingent was approved.

Carr moved to adjourn. Roussin seconded the motion. The motion to adjourn was approved. The meeting was adjourned at 2:05 p.m.

APPROVAL FORM FOR

DEGREE PROGRAMS

MISSISSIPPI STATE UNIVERSITY

NOTE: This form is a cover sheet that must accompany the degree program change proposal. The actual proposal should be prepared in accordance with format requirements provided in the *Guide and Format for Curriculum Proposals* published by the UCCC. Both cover sheet and proposal should be submitted to UCCC Mail Stop 9702 (281 Garner Hall), Phone: 325-9410.

College: Agriculture & Life Sciences Department: Agricultural Economics

Contact Person: (Dr.) Seong YunMail Stop: 9755E-mail: seong.yun@msstate.eduNature of Change: ModificationDate Initiated: 1/21/2020Effective Date: Fall 2020Current Degree Program Name: Bachelor of ScienceScience

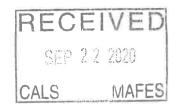
Major: Concentration: Environmental Economics and Management (EEM)

New Degree Program Name: Bachelor of Science

Major: Concentration: Environmental Economics and Sustainability (EES)

Summary of Proposed Changes:

- An undergraduate major name modification:
 "Environmental Economics & Management" (EEM) to "Environmental Economics & Sustainability" (EES)
- This name modification proposal is to emphasize one of the central foundations of environmental economics which have always been present in our curriculum: sustainability. The Department of Agricultural Economics recently obtained UCCC approval (in Spring 2020) for two courses: 1) AEC 2223: Sustainability Economics teaching in this semester (Fall 2020) first time, and 2) AEC 2631: Environmental Economics & Sustainability Seminar first teaching in Spring 2021. These two are included in the curriculum as major core courses for the EES major.



Approved:

Date:

Ket H Colle

Digitally signed by Keith Coble DN: cn=Keith Coble, o=MSU, ou=Ag Economics, emall=coble@agecon.msstate.edu, c=US Date: 2020.09.18 13:22:10-05'00'

Department Head

Chair, College or School Curriculum Committee

Dean of College of School

181 22/2020 9

Chair, University Committee on Courses and Curricula

Chair, Graduate Council(if applicable)

Chair, Deans Council

DEGREE MODIFICATION OUTLINE FORM

Use the chart below to make modifications to an existing undergraduate degree outline. If any General Education (Core) course is acceptable in the category, please indicate by saying "any Gen Ed course". There is no need to type in the whole list. All deleted courses and information should be shown in *italies* and all new courses and information in **bold**. Include the course prefix, number, and title in both columns. Expand this table as needed.

CURRENT Degree Description		PROPOSED Degree Description		
Degree: Bachelor of Science		Degree: Bachelor of Science		
Major: Environmental Economics and Manag	rement	Major: Environmental Economics and Sustainability		
The Environmental Economics and Managem		The Environmental Economics and Sustaina		
major is designed to prepare students for the		(EES) major is designed to prepare students for		
and productive management of natural and	ernoloni	efficient and productive sustainable managem		
	I la u t	natural and environmental resources. Students		
environmental resources. Students receive ex				
functional training and learn skills in the area		excellent functional training and learn skills in		
environmental science, policy and economics	. Potential	of environmental science, policy and economic		
career fields include, but are not limited to,		Potential career fields include, but are not limit		
environmental law; natural resource and envi		environmental law; natural resource and enviro		
policy analysis; environmental consulting; an		policy analysis; environmental consulting; and		
management. In addition, students desiring po		management. In addition, students desiring pos		
training will have a solid academic foundation	n for	training will have a solid academic foundation	for	
pursuing graduate or professional degrees.		pursuing graduate or professional degrees.		
"[Click here and type new concentration desc	ription]"	"[Click here and type new concentration descri	ption]"	
PROPOSED CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours	
English:		English:		
EN 1103 English Composition I or		EN 1103 English Composition I or		
EN 1163 Accelerated Composition I	6	EN 1163 Accelerated Composition I	6	
EN 1113 English Composition II or		EN 1113 English Composition II or		
EN 1173 Accelerated Composition II		EN 1173 Accelerated Composition II		
Fine Arts (General Education):		Fine Arts (General Education):	-	
Any Gen Ed course	3	Any Gen Ed course	3	
Natural Sciences:		Natural Sciences:		
BIO 1134 Biology I		BIO 1134 Biology I		
BIO 1144 Biology II	8	BIO 1144 Biology II	8	
Math (General Education):		Math (General Education):		
Math (General Education):				
MA 1313 College Algebra	9	MA 1313 College Algebra MA 1713 Calculus I	9	
MA 1713 Calculus I	9			
MA 3123 Introduction to Statistical		MA 3123 Introduction to Statistical		
Inference		Inference		
Humanities (General Education):		Humanities (General Education):		
Any Humanities Gen Ed courses of 6	6	Any Humanities Gen Ed courses of 6 credits	6	
credits total		total		
Social/Behavioral Sciences (Gen Ed):		Social/Behavioral Sciences (Gen Ed):		
AEC 2713 Introduction to Food and		AEC 2713 Introduction to Food and		
Resource Economics or	6	Resource Economics or	6	
EC 2123 Principles of Microeconomics and		EC 2123 Principles of Microeconomics and		
EC 2113 Principles of Macroeconomics		EC 2113 Principles of Macroeconomics		
Major Core Courses		Major Core Courses		
	52		56	

AEC 2611 Seminar I AEC 3113 Introduction to Quantitative Economics AEC 3233 Introduction to Environmental Economics and Policy AEC 3513 Economics of Food and Fiber Production AEC 4133 Analysis of Food Markets and Prices AEC 4223 Applied Quantitative Analysis in Agricultural Economics AEC 4233 Environmental Economics AEC 4233 Environmental Economics AEC 4243 Natural Resource Economics AEC 4243 Natural Resource Economics AEC 4243 Natural Resource Economics AEC 4413 Public Problems of Agriculture WFA 3133 Applied Aquatic and Terrestrial Ecology or BIO 3104 Ecology BL 2413 Legal Envt Bus BL 4263 Environmental Law EC 3113 Intermediate Macroeconomics EC 4423 Public Finance PS 1113 American Government		AEC 2333 Sustainability Economics AEC 2611 Seminar I AEC 2631 Environmental Economics & Sustainability Seminar AEC 3113 Introduction to Quantitative Economics AEC 3233 Introduction to Environmental Economics and Policy AEC 3513 Economics of Food and Fiber Production AEC 4133 Analysis of Food Markets and Prices AEC 4223 Applied Quantitative Analysis in Agricultural Economics AEC 4233 Environmental Economics AEC 4233 Environmental Economics AEC 4243 Natural Resource Economics AEC 4243 Natural Resource Economics AEC 4413 Public Problems of Agriculture WFA 3133 Applied Aquatic and Terrestrial Ecology or BIO 3104 Ecology BL 2413 Legal Envt Bus BL 4263 Environmental Law EC 3113 Intermediate Macroeconomics EC 4423 Public Finance PS 1113 American Government PC 2702 L to the to Dublic Dublic Dublic	
Writing Requirement AELC 3203 Professional Writing in Agriculture, Natural Resources, and Human Sciences	3	Writing Requirement AELC 3203 Professional Writing in Agriculture, Natural Resources, and Human Sciences	3
Oral Communication Requirement CO 1003 Fundamentals of Public Speaking or CO 1013 Introduction to Communication	3	Oral Communication Requirement CO 1003 Fundamentals of Public Speaking or CO 1013 Introduction to Communication	3
Free Electives	28	Free Electives	24
Total Hours	124	Total Hours	124

JUSTIFICATION AND STUDENT LEARNING OUTCOMES

Economics is the study of how to make good decisions by comparing benefits and costs, and environmental economics is the study of how to make good decisions related to the environment and natural resources. Despite environmental economics being a major field within economics with thousands of practitioners across all sectors and many large continental, national, and regional professional associations, many outside the field—including prospective students—do not know what environmental economics is or what studying it entails.

Since its inception in 2009, the Department of Agricultural Economics' Environmental Economics and Management (EEM) major has consistently attracted top-quality students who are very ambitious about their undergraduate education, about being highly competitive in the job market, and about going to graduate school. The purpose of changing the name of our department's major to Environmental Economics and Sustainability (EES) is to emphasize one of the central foundations of environmental economics which has always been present in our curriculum: *sustainability*. Birdwatching, wildlife (including threatened and endangered species), clean water, natural spaces, etc., all provide enormous benefits and losing them is costly. The continuation of these

environmental benefits is itself sustainability, so making good decisions about the environment by comparing benefits and costs—that is, environmental economics—necessitates sustainability. The current name, EEM, was created to emphasize our departmental goal of providing and training our students with respect to environmental/resource economics and managing resources based on economic principles and an economic framework. The current most cutting edge knowledge and skillsets in economics entail *sustainable* management and thus, the Department raises the necessity of bringing and promoting sustainability as a more timely concept of management.

Whereas the name of the general field, "environmental economics", may sound intriguing but yet remain mysterious to prospective students and potential employers of our graduates, "sustainability" is a concept that is much more familiar to both parties. So it is our hope that renaming the major to *Environmental Economics and Sustainability* will help better match students for whom the major is a great fit to the major itself.

In agricultural and applied economics programs, pursuing and targeting *sustainability* in the undergraduate degree is one of the newly emerging trends that the major state universities have adopted as a strategic long-term plan. One example is the Department of Agricultural, Environmental, and Development Economics at The Ohio State University that offers the Environment, Economy, Development, and Sustainability (EEDS) major. In the case of the Department of Agricultural and Consumer Economics at the University of Illinois at Urbana-Champaign, they recently initiated the Center for the Economics of Sustainability which provides courses heavily focused on *sustainability* and economics to train their students for expertise in this field combined with research programs in their department. The degree name change we are pursuing is timely and consistent with other similar programs in the agricultural and applied economics field.

To draw the attention of current and prospective students, their parents, and community stakeholders' to the teaching and research opportunities in the Department of Agricultural Economics, the proposed major name modification has been discussed in the Department since Fall 2019. The proposed name was selected based on feedback from inquires and surveys of current and past students and faculty on the strengths of our major and its proper framing for accurate and informative social media and other marketing and publicity.

Notes on the previous UCCC concerns from our previous application:

1. Concerns on the lack of environmental sciences

We understand that some members of the UCCC had concerns that the major's curriculum did not include enough courses in environmental science. While environmental science knowledge might in some cases prove useful, environmental economists do not generally study environmental science related to physical processes. This is similar to how agricultural economists do not generally study plant science, health economists do not study nutrition, or sports economists do not study the mechanics of a basketball free throw. Economics is a social science which complements other sciences depending on the decision to be made, but it does not encompass knowledge about physical processes that would be covered in these other sciences.

2. Concerns on the lack of sustainability courses in the curriculum

As mentioned, environmental and natural resource economics includes sustainability as a core concept. Although many courses in the current curriculum do not explicitly include the word "sustainability" in its name, sustainability features in all the core AEC courses related to environmental and natural resource economics as it is integral to environmental decision-making. In addition, the Department of Agricultural Economics recently created and obtained UCCC approval (in Spring 2020) for two courses introducing major concepts and topics related to the central role of sustainability in economics:

AEC 2223: Sustainability Economics (teaching in Fall 2020 first time) AEC 2631: Environmental Economics & Sustainability Seminar (first teaching in Spring 2021).

These two courses are included in the curriculum as major core courses for the EES major.



DEPARTMENT OF AGRICULTURAL ECONOMICS P. O. Box 5187 Mississippi State, MS 39762 P. 662.325.2750 agecon.msstate.edu

24 September, 2020

Dr. Dana Pomykal Franz University Committee on Courses and Curricula P.O. Box 9705 Mississippi State, MS 39762

Dear Dr. Franz:

The Department of Agricultural Economics is submitting the following revised undergraduate major name modification proposal from "Environmental Economics & Management" (EEM) to "Environmental Economics & Sustainability" (EES).

The proposed major name modification is to meet the current social and academic emphasis on one of the central foundations of environmental economics which have always been present in our curriculum: *sustainability*. The current EEM curriculum maintains a rigid program in the fields of environmental and natural resource economics, management, and sustainability. The purpose of the major name modification is to attract the attention of current and prospective students, their parents, and community stakeholders to the teaching and research efforts in the Department in this area. The proposed major name modification has been discussed in the Department since Fall 2019. The proposed name was selected from a survey of the current and past students, faculty, and social media experts in the Department.

To reflect the revision requests of the CALS CC and UCCC on the previously submitted proposal, the proposed name modification also adds two sustainability courses recently approved (Spring 2020) by the UCCC in the current curriculum: AEC 2223 Sustainability Economics and AEC 2631 Environmental Economics & Sustainability Seminar. In addition, we believe that the revised proposal provides better justification for the needs of the proposed name change. The Agricultural Economics Departmental Curriculum Committee unanimously supports the proposed modification. If you have any further questions, please feel free to contact me.

Sincerely,



DEPARTMENT OF AGRICULTURAL ECONOMICS P. O. Box 5187 Mississippi State, MS 39762 P. 662.325.2750 agecon.msstate.edu

Ardian Harri

Digitally signed by Ardian Harri DN: cn=Ardian Harri, o=Mississippi State University, ou=Department of Agricultural Economics, email=ardian.harri@msstate.edu, c=US Date: 2020.09.25 09:47:30 -05'00'

Ardian Harri, Professor Chair, Curriculum Committee Department of Agricultural Economics (662) 325-5179 harri@agecon.msstate.edu

Randall D. Little

Digitally signed by Randall D. Little Date: 2020.09.25 10:14:33 -05'00'

Randy Little Professor Curriculum Committee Member



Digitally signed by Xiaofei Li DN: CN=Xiaofei Li, O=Ag Econ, OU=MSU, E=XL278@msstate.edu, C=US Reason: I am the author of this document Location: your signing location here Date: 2020-09-25 10:43:36 FoxIt Reader Version: 9.5.0

Xiaofei Li, Assistant Professor Curriculum Committee Member

Seong Yun

Digitally signed by Seong Yun DN: cn=Seong Yun, o=Missksippi State University, ou=Department of Agricultural Economics, email=seong.yun@msstate.edu, c=US Date: 2020.09.25 11:17:57 -05'00'

Seong Yun Assistant Professor Curriculum Committee Member



DEPARTMENT OF AGRICULTURAL ECONOMICS P. O. Box 5187 Mississippi State, MS 39762 P. 662.325.2750 agecon.msstate.edu

29 January, 2020

Dr. Dana Pomykal Franz University Committee on Courses and Curricula P.O. Box 9705 Mississippi State, MS 39762

Dear Dr. Franz:

The Department of Agricultural Economics is submitting the following undergraduate major name modification proposal from "Environmental Economics & Management" (EEM) to "Environmental Economics & Sustainability" (EES).

The proposed major name modification is to meet the current social and academic emphasis on sustainability sciences. The current EEM curriculum maintains a rigid curriculum in the fields of environmental and natural resource economics, management, and sustainability. To bring more current and prospective students, their parents, and community stakeholders' attention on teaching and research roles in the Departement, the proposed major name modification has been discussed in the Department since Fall 2019. The proposed name was selected from the survey to the current and past students, faculty, and social media expertise in the Department.

The proposed name modification does NOT accompany the current EEM major curriculum. For the coming future needs, the Department will proceed with the addition or modification of current courses depending upon the approval on this request.

The Agricultural Economics Departmental Curriculum Committee unanimously supports the proposed modification. If you have any further questions, please feel free to contact me.

Sincerely,

Arstion Herri 01/27/2020

Ardian Harri, Professor Chair, Curriculum Committee Department of Agricultural Economics (662) 325-5179 <u>harri@agecon.msstate.edu</u>



DEPARTMENT OF AGRICULTURAL ECONOMICS P. O. Box 5187 Mississippi State, MS 39762 P. 662.325.2750 agecon.msstate.cdu

alal Pata 1/21/2020

Randy Little Professor Curriculum Committee Member

Diasti Li 1/27/2020

Xiaofei Li, Assistant Professor Curriculum Committee Member

270 1/27/2020

Seong Yun Assistant Professor Curriculum Committee Member

Appendix 9a: Modifications to Existing Degree Program Proposal (Renaming) (Submit Appendix 9a in both PDF and Word Document Formats)

Institution:					
Date of Implementat	ion:	Present 6-Digit CIP Code(s) & 4-Digit Sequence Code(s):		New 6-Digit CIP Code:	
Fall 2020		03.0204		03.0204	
Present Program Titl	la(e) as Annoar(a)	on Academic Program		CIP & Sequence codes: <u>IHI. Active Program Inventory</u> itle as will Appear on Academic Program	
Inventory, Diploma,		Ju Academic I Togram		ma, and Transcript:	
Environmental Econom	nics and Manageme	nt	Environmental Eco	pnomics and Sustainability	
Degree(s) to be Awar	ded:		Credit Hour Re	equirements:	
Bachelor of Science			124 Credit Hours		
, i	within the state off	ering similar programs:			
None					
Responsible Academ	ic Unit(s):		Institutional Co	ntact: (Dr.) Randall Little	
Department of Agricult			Phone:	(662) 325 - 2884	
			Email:	Little@agecon.msstate.edu	
Number of Students	Enrolled in Last S	ix Years:	Number of Gra	duates Expected in Next Six Years:	
Year One	29			ar One 15	
Year Two	25		Yea	ar Two 20	
Year Three	24		Year	Three 25	
Year Four	14			r Four 30	
Year Five				ar Five 30	
Year Six			Y	ear Six 40	
Total	115			Total 160	
Program Summary:					
The Environmental Economics and Sustainability major is designed for students who want to make a difference in the world now and in the future. The need for efficient and sustainable management of natural and environmental resources is greater than ever before, and the training students receive in the Environmental Economics and Sustainability major prepares them for the challenge. Students learn the skills they need through three major areas. The first is environmental science, where students learn fundamentals about biology, chemistry, and ecology. The second area is policy, where students take courses in government, law, and how they interact with the environment. The third					
Chief Academic Officer Signature Date					
Institutional Executiv	ve Officer Signatu	re	Date		
Institution:					

1.	Describe how the proposed modification fits within the mission of the institution.
	Following the MSU's institutional objectives on stainability sciences, Agricultural Economics Department has maintained an undergraduate major curriculum of Environmental Economics and Management. The recent emphasis on stainability brought the departmental attention, and our department has considered to strengthen the program goals and objectives to the MSU. This major name change fits the MSU's institutional goals to become one of the leading institution in stainability sciences and Agricultural Economics Department keep providing environmental economics and stainability curriculum in the economics perspective.
2.	Is this modification unnecessarily duplicative of other programs within the System?
	No.
3.	Describe the anticipated institutional impact including any research efforts associated with this program.
	Agricultural Economics Department is one of the most active departments produces high quality of research and secures competitive grants. Emphasizing stainability in the perspective of economics, we expect to hold more students interested in environmental and resource stainability and train them in multidisciplinary fields of stainability sciences. This expected phases will bring more productive and competitive research efforts to the department and MSU.
4.	Are there any anticipated budget savings associated with the proposed modification?
	No.
5.	Are there any changes to the educational objectives of the degree program associated with the proposed modification? No.
6.	Are there any changes to the curriculum of the degree program associated with the proposed modification? No.
7.	Describe how the proposed modification will affect program faculty.
	Agricultural Economics Department has experienced an significant decrease in the number of EEM major students compared to agribusiness majors in the department. Whole departmental members including faculty continues our efforts to bring more ambitious and capable students to the EEM major. As one of these efforts, the proposed major modification is expected to bring more attention to the current and prospective students, their parents, and community stakeholders. In addition, the program will contribute to more abundant research and teaching activities to the faculty in the department.
8.	Describe the evaluation process which led to the request for the proposed modification.

APPROVAL FORM FOR

DEGREE PROGRAMS

MISSISSIPPI STATE UNIVERSITY

NOTE: This form is a cover sheet that must accompany the degree program change proposal. The actual proposal should be prepared in accordance with format requirements provided in the *Guide and Format for Curriculum Proposals* published by the UCCC. Both cover sheet and proposal should be submitted to UCCC Mail Stop 9702 (281 Garner Hall), Phone: 325-9410.

College: Architecture, Art, and Design (CAAD) Department: Architecture

Contact Person: John Poros and Christopher S. Hunter Mail Stop: 9633

E-mail: jporos@caad.msstate.edu and chunter@caad.msstate.edu

Nature of Change: New Certificate Program

Date Initiated: September 2020

Effective Date: Spring 2021

Current Degree Program Name:

Major:

Concentration:

New Degree Program Name: Historic Preservation Certificate

Major:

Concentration:

Summary of Proposed Changes:

The purpose of this certificate program is to introduce an academic vehicle which presents a path for the identification, examination, and archiving of the historic, architecture, and cultural context, buildings, and places of the state of Mississippi.

Approved:

Date:

Jassen Callender

Department Head

orne

Chair, College or School Curriculum Committee

Dean of College or School

14 September 2020

September 14, 2020

9-14-2000

Chair, University Committee on Courses and Curricula

Chair, Graduate Council(if applicable)

Chair, Deans Council

Appendix 16: Intent to Offer, Modify, or Delete Certificate* Program (Submit Appendix 16 in both PDF and Word Document Formats)

Institut	ion:		
Date of Implementation: Spring Semester 2021		Six-Digit CIP Code (& Four-Digit Sequence Code if modification/delet 30.1202	
	and the second	CIP & Sequence codes: IHL Active Program	Inventory
Program Title as will Appear on Academic Progra		m Inventory:	🖬 Offer 🔲 Modify 🖾 Delete
Responsible Academic Unit(s): College of Architecture Art and Design			nd Christopher S. Hunter .325.8719 and C. Hunter #662.325.0567 msstate.edu and chunter@caad.msstate.edu
1	onal Certificate: Yes No of the following best describes the certificat	Credit Bearing Program: Yes No	Title IV Financial Aid Eligible: Yes No
	Pre-Baccalaureate (Less than 1 Year)		less than one academic year: designed for
X	Pre-Baccalaureate	Undergraduate program with duration	at least 1 year; designed for completion in at
	(At Least 1 Year) Post-Baccalaureate	least 30 hours; does not meet requirements for Associate's or Bachelor's degree. Program designed beyond the baccalaureate degree but does not meet the	
	Post-Master's	requirements for a master's degree Program designed beyond the master's degree but does not meet the requirem for a doctoral degree	
	Other	Other certificate program not meeting one of the four criteria above.	
The his archited totaling	Im Summary: toric preservation certificate program is to provi stural, and cultural context of the state of Missis fifteen credit hours to receive a historic preserv in the area of specialization for each individual s	sippl. Students will need to complete five ation certificate. This certificate will be av	 undergraduate and / or graduate courses vailable to architecture majors and additional
Institutional Contact Signature		Date	
Chief Academic Officer Signature		Date	
profess	icate programs added to the Academic Program sional benefit to program completers. Undergr ms that are not credit-bearing or are lifelong le not be included in the Academic Program Invo	aduate certificates are eligible for Title I arning in nature (i.e. photography, travel	V financial aid programs. Certificate

PROPOSAL FOR ADDITION OF CERTIFICATE PROGRAM

1. CATALOG DESCRIPTION

The Historic Preservation Certificate (HPC) offered by the School of Architecture in the College of Architecture, Art, and Design (CAAD) program will complement existing B. Arch degree tracks by adding an opportunity to students from any program to complete a formal and coherent grouping of courses with a focus in historic preservation. The goal of the HPC is to introduce a certification vehicle which presents an academic path for the identification, examination, and archiving of the historic, architectural, and cultural context of the state of Mississippi. Recipients of the certificate will be equipped with academic and professional knowledge, technical skills, and research experience to work with professionals from the construction and design industries, municipalities, property developers, and preservationists in the recognition, renovation, and restoration of real property for reuse in society. Students will need to complete undergraduate and / or graduate courses totaling fifteen (15) credit hours. Required courses include the following:

- ARC 3323 History of Architecture III
- ARC 6623 Historic Preservation Research Methods
- ID 2403 Introduction to Historic Preservation

The student shall select six credit hours from a list of courses approved by the CAAD certificate coordinator. The required CAAD courses are offered throughout the academic year face to face (fall or spring) and online (summer).

2. CURRICULUM OUTLINE

The program of the Historic Preservation Certificate (HPC) will be administered through the College of Architecture, Art, and Design (CAAD). A CAAD faculty member will be assigned as the HPC coordinator and will oversee the program's administration. The HPC coordinator will report on the progress of the program to the Director and Dean of the CAAD. The HPC is open to any undergraduate degree-seeking student in good standing enrolled at the university. Students may complete the certificate as Campus 1.

Required Courses	Hours
ARC 3323 History of Architecture III	3
ARC 6623 Historic Preservation Research Methods	3
ID 2403 Introduction to Historic Preservation	3
Approved Elective Courses (select six credit hours)	Hours
LA 2652 Landscape Architecture Precedent Studies	2
LA 3554 Landscape Architecture Design III	4
LA 3623 Urban Planning Theory	3
LA 3654 Landscape Architecture Design IV: Urban Design	4
LA 4113 Design Theory and Criticism	3
LA 4843 Sustainable Communities	3
BL 4333 Real Estate Law	3
AN 2203 Cultural and Racial Minorities	3
AN 2510 Archaeological Field Methods (survey)	1-6
AN 4143 Ethnographic Methods	3
AN 4173 Environment and Society	3
AN 4523 Public Archeology	3
AAS 4363 African American History and Culture	3
AAS 4373 History of Modern Civil Rights Movement	3
ID 3653 History of Interiors II	3
REF 3333 Principles of Real Estate	3
REF 3433 Real Property Evaluation	3
ARC 5623 Theory of Urban Design (required for students in the architecture program)	3
ARC 4613 CREATE Common Ground	3
Additional approved electives	
Total Required Hours for Certificate	15

3. COURSE DESCRIPTIONS FOR THE CERTIFICATE

ARC 3323 History of Architecture III: Three hour lecture. Survey of major developments in American architecture and survey of major developments in European architecture during the Nineteenth and Twentieth Centuries.

ARC 6623 Historic Preservation Research Methods: (Prerequisite: Junior or Graduate standing or consent of the instructor). Three hour seminar. Instruction in the research methods to identify, record, and assess historic structures and sites.

ID 2403 Introduction to Historic Preservation: Three hour lecture. An introduction to American historic preservation, its history, principles, and practice.

Electives: Students will select six credit hours related to their area of specialization and submit for approval by the HPC coordinator. Courses should focus on the technical

processes specific to an industry and must be 2000 level or higher. Course approvals will be granted during the scheduled University advising period.

4. JUSTIFICATION FOR THE HISTORIC PRESERVATION CERTIFICATE

The state of Mississippi is considered a leader in Historic Preservation. The congressional delegation of the state led the charge to maintain the Historic Preservation Tax Credits in 2017. The Mississippi Department of Archives and History (MDAH), located in Jackson, Mississippi and founded in 1902, is the second oldest such department in the United States. However, the state does not have an academic component that can educate and train students in historic preservation. Such a program must be designed in accordance with requirements established by the National Council for Preservation Education (NCPE). Therefore, the purpose of this certificate program is to introduce an academic vehicle which provides an educational and professional path for the identification, examination, and archiving of the historic, architectural, and cultural context of the state of Mississippi. There is currently strong interest by students, various campus departments, municipalities, professional organizations such as MDAH, the Mississippi Heritage Trust, and the Mississippi Chapter of the American Institute of Architects, and private businesses such as architecture firms to develop this academic component. This academic component can serve as a coordinating entity to bring these various stakeholders together to collaboratively examine and create comprehensive development strategies with a goal to recognize and save buildings and sites worthy of not only historic recognition but continued contribution to society through repurposing and adaptive reuse. Concurrently, the program shall provide MSU students with the opportunity to learn in the classroom as well as garner real world experience in order to produce future professionals ready to take their place in society as contributors and gatekeepers to the recognition, preservation, and maintenance of Mississippi's rich history.

5. STUDENT LEARNING OUTCOMES AND ASSESSMENT

The certificate program will prepare students for a business segment of the practice of architecture and interior design that continues to positively be influenced by sustainability practices in the industry, partly driven by the developmental approach of the renovation an existing building as the most economically efficient strategy for use application, as well as controlling the expansion of the carbon footprint created by newly constructed buildings on virgin land. Preservation and reuse of historic buildings reduces resource and material consumption, puts less waste in landfills, and consumes less energy than demolishing building and constructing new one. As such, following the completion of the certificate coursework, students will be able to:

- Have an understanding of the history, theory, and practice of historic preservation.
- Gain knowledge of the history of the built environment (i.e., architecture, urban development, landscape architecture, archaeology, material culture of varying demographic, real estate principles, etc.)

- Understanding the documentation and recording techniques currently used in preservation practice.
- Exposure to influential disciplines (included but not limited to design, technology, economic, law, planning, history, tourism conservation, and curation, etc.)
- 6. EFFECTIVE DATE: Spring 2021
- 7. PROPOSED FOUR-LETTER ABBREVIATION: None
- 8. CONTACTS:

John Poros, AIA, Professor Christopher S. Hunter, PhD, Assistant Professor School of Architecture College of Architecture, Art, and Design 899 Collegeview Street, Box AQ Mississippi State, MS 39762 Poros at 662.325.8719 and <u>iporos@caad.msstate.edu</u> Hunter at 662.325.0567 and <u>chunter@caad.msstate.edu</u>

9. LETTERS OF SUPORT: Please see the attached letters of support.



SCHOOL OF ARCHITECTURE

College of Architecture, Art and Design

P.O. Box AQ 240 Giles Hall | 899 Collegeview Street Mississippi State, MS 39762

> P. 662.325.2202 F. 662.325.8872

caad.msstate.edu/sarc

June 3, 2020

Director Jassen Callender School of Architecture P.O. Box AQ Mississippi State, Mississippi 39762

ISSISSIPPI STATE

U N I V E R S I T Y

Dear Director Callender,

The School of Architecture Curriculum Committee unanimously agrees and supports the establishment of a Certificate in Historic Preservation. The Certificate in Historic Preservation will provide architecture students with valuable training in a specialty that is needed in the State of Mississippi. Currently, there is no academic program in the state to train students in historic preservation. Various campus departments, state municipalities, the Mississippi Department of Architects support the certificate program for this reason. The addition of this certificate program, we believe, will lead to a full master's degree program in historic preservation in the future. The course of study proposed here can be met by our students and there is interest in the program from current students. The committee supports this effort and is available to answer any questions you have regarding the proposal.

Sincerely,

Recoverable Signature

John Poros

John Poros Chair, Curriculum Committee Signed by: jgp8

Silvina **Lo**pez Barrera Assistant Professor

Gine Jacob

Associate Professor

7 Alexis Gregory / Associate Professor Dr. Christopher Hunter Assistent Professor

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MARK S. VANEMAL

Mark Vaughan Visiting Assistant Professor



MISSISSIPPI STATE UNIVERSITY DEPARTMENT OF ANTHROPOLOGY AND MIDDLE EASTERN CULTURES

June 8, 2020

Dear Dr. Hunter:

This letter is written on behalf of the Department of Anthropology and Middle Eastern Cultures (AMEC). It is attestation that the AMEC Curriculum Committee and AMEC faculty have reviewed the materials that we were sent for the new Historic Preservation certificate and have agreed to support the following action:

1) Addition of a new certificate: Historic Preservation

The certificate entails offering select anthropology courses as electives. We believe the certificate would be a welcome addition to MSU's curriculum and fully support its approval.

Sincerely,

plus

Dr. Hsain Ilahiane AMEC Department Head Professor

Dr. Anna Osterholtz AMEC Curriculum Committee Member Assistant Professor

Lama K Made

Dr. Kate McClellan AMEC Curriculum Committee Chair Assistant Professor

D. Shane Mill

Dr. D. Shane Miller AMEC Curriculum Committee Member Associate Professor

Re: Letter or Support

Shaffer, Don <DShaffer@english.msstate.edu> Mon 8/10/2020 3:21 PM To: Hunter, Christopher <chunter@caad.msstate.edu> Dear Christopher:

Yes, I'm very much in support. And thank you for including AAS courses in the curriculum.

I will send you the letter this week.

Best, Don Shaffer

Get Outlook for iOS

From: Hunter, Christopher <chunter@caad.msstate.edu> Sent: Monday, August 10, 2020 3:17:10 PM To: Shaffer, Don <DShaffer@english.msstate.edu> Subject: Letter or Support

Don:

I hope this note finds you staying safe and healthy.

I wanted to follow up on an email I sent you back May 4th regarding a historic preservation certificate program I am trying to get started in the school of architecture. i have put together a curriculum for a fifteen-credit hour certificate granting program with the plan of getting it going by the spring semester, 2021. We are almost ready for paperwork submission, but I need secure a couple of letters of support, with you being one of them.

I have listed the following courses from AAS to be included on a list of electives for the certificate program:

- 1. AAS 4363 African American History and Culture (three hours)
- 2. AAS 4373 History of the Modern Civil Rights Movement (three hours)

I am looking the submit the paperwork for the certificate program no later than the end of August. If you are in support of this certificate I would greatly appreciate it if you could write a letter of support. I have emailed you a link to the Google drive folder that contains the powerpoint presentation about the certificate program for your review.

Please give me a shout when you can. Thank you for your consideration.

CSH



Department of Landscape Architecture College of Agriculture and Life Sciences Mississippi State University

Campus Correspondence

To: Christopher S. Hunter, Ph.D. Assistant Professor And Jassen Callender, Director School of Architecture Mississippi State University

August 10, 2020

From: Sadik C. Artunç, FASLA Professor and Head Department of Landscape Architecture

Re: Letter of Support for the Establishment of a Certificate of Historic Preservation

On behalf of the Department of Landscape Architecture and the Curriculum Committee, it is my pleasure to express our strong support for the establishment of a Certificate in Historic Preservation Program in the School of Architecture. The Certificate in Historic Preservation will provide students in architecture and landscape architecture with valuable training in a specialty that is needed in the State of Mississippi. Currently, there is no academic program in the state to train students in historic preservation whether it is preservation of historic buildings or historic landscapes. Various campus departments, state municipalities, the Mississippi Department of Archives and History, as well as professional organizations such as the Mississippi Chapter of the American Society of Landscape Architects (ASLA) support the certificate program for this reason.

The certificate entails offering select landscape architecture courses as electives. We believe the certificate would be a welcome addition to MSU's curriculum and fully support its approval. The Department of Landscape Architecture supports this effort and is available to answer any questions you have regarding the proposal

Please, do not hesitate to contact me if you have any questions for this request.

Sincerely,

SADIK C. ARTUNÇ, FASLA Professor and Head Department of Landscape Architecture College of Agriculture and Life Sciences Mississippi State University, MS 39762 Mail Stop 9725 Phone (662) 325-7894 • Fax (662) 325-7893 • E-mail: sa305@msstate.edu MISSISSIPPI STATE



COLLEGE OF ARCHITECTURE, ART AND DESIGN Interior Design Program P.O. Box 6227 125 Etheredge Hall | 449 Hardy Road Mississippi State, MS 39762 P. 662.325.0530 F. 662.325.5754

caad.msstate.edv/id

May 15, 2020

Director Jassen Callender School of Architecture P. O . Box AQ Mississippi State, Mississippi 39762

Dear Director Callender,

I am writing this letter in support of the new course offering that the School of Architecture is proposing to the University Committee on Course Curricula. The course offering is ARC 6623, Historic Preservation Research Methods.

The Interior Design Program is in the process of preparing a proposal for a Historic Preservation Masters in the College of Architecture, Art, and Design. The course offering ARC 6623, Historic Preservation Research Methods will become part of the core requirements for all graduate students in the Historic Preservation Master's degree program. We also support the undergraduate Historic Preservation Certificate that the School of Architecture is developing. The certificate would enhance students' interest in historic preservation and begin a cultural appreciation and participation in the historic preservation movement that would benefit the School of Architecture and the Historic Preservation Master's degree program. Please let me know if you need further information concerning Interior Design's support for this new course offering in the School of Architecture.

Regards,

Bert RMile

Dr. Beth R. Miller Professor | Director

MISSISSIPPI DEPARTMENT of ARCHIVES AND HISTORY



PO Box 571, Jackson, MS 39205-0571 601-576-6850 mdah.ms.gov *Katie Blount, Director*

May 11, 2020

Mr. Jassen Callender College of Architecture, Art and Design 899 Collegeview St. 240 Giles Hall Mississippi State, MS 39762

Dear Mr. Callender:

As the director of the Mississippi Department of Archives and History (MDAH) and the State Historic Preservation Officer, I am writing to enthusiastically support the Mississippi State University School of Architecture's historic preservation certificate program.

Founded in 1902, MDAH is the nation's second-oldest comprehensive state historical agency. We administer all of the state and federal historic preservation programs, including technical assistance, tax credits, and grants. A historic preservation program at one of our flagship universities has been long needed and will greatly enhance Mississippi's historic preservation effort, allowing students to engage with local historical architecture, become leaders in the preservation field, and emerge as professionals in this area. Furthermore, this certification program will strengthen MDAH's connection with MSU as we develop academic and professional relationships with students.

Mississippi State University is an outstanding steward of preservation on its historic campus, and the School of Architecture is the ideal setting for a historic preservation program certified by the National Council for Preservation Education. I fully support this application.

Sincerely,

Katie Blount Director

Board of Trustees: Kane Ditto, president | Reuben V. Anderson | Nancy Carpenter | Valencia Hall | Betsey Hamilton | Web Heidelberg Mark E. Keenum | Hilda Cope Povall | Roland Weeks



May 18, 2020

Jassen Callender, Interim Director MSU School of Architecture 240 Giles Hall Post Office Box AQ Mississippi State, MS 39762

Dear Jassen,

The Southeast Chapter of the Society of Architectural Historians (SESAH) wholeheartedly supports the establishment of a historic preservation certificate program at the Mississippi State University School of Architecture. Represented by Michael Fazio, MSU was one of the institutions that helped found SESAH in the 1980s, and our organization is still composed of both academic architectural historians and active practitioners in the field of architecture.

There are several historic preservation programs in the Southeast region certified by the National Council for Preservation Education, but many of them are master-level programs focused on public history or traditional craft practitioners such as the programs at the University of Georgia and Tulane University. The few that allow student architects to receive training in preservation practices that will engage their architectural careers are located at institutions such as Texas A&M that would require Mississippi students to leave the state to receive their training, making it likely that they will establish their practice and their expertise elsewhere. All of us involved in the historic preservation field know that in many cases, the architect—rather than public policy or historic preservation organizations—is the most important influence in guiding clients to preserve their historic buildings, and Mississippi has many publicly owned Mississippi Landmarks whose owners need a skilled practitioner to outline the best preservation plan for their building.

In short, we believe that the need is evident and that MSU is well-placed to lead Mississippi's first NCPE-certified historic preservation program. This would carry on the legacy of Michael Fazio, who did so much to train Mississippi's architects and give them a love of architectural history. As the School considers how to move forward with this important new offering, we look forward to being a partner in your preservation program.

Jennifer Baughn President Southeast Chapter, Society of Architectural Historians

5/11/20

Evan Peacock Chair Starkville Historic Preservation Commission

Dr. Christopher Hunter College for Architecture, Art and Design Mississippi State University

Dr. Dr. Hunter:

I write this letter to express the enthusiastic support of the Starkville Historic Preservation Commission for the proposed Certificate in Historic Preservation you are working on with Professor Poros and other colleagues. Starkville has built some healthy momentum where historic preservation is concerned, largely due to the pioneering efforts of Michael Fazio. Our relationship with the Mississippi Department of Archives and History is strong and growing, and we see Starkville as a model community for collaborating with local, state, and regional bodies to forward the cause of historic preservation. Our relationship with Mississippi State University likewise is an important one that would benefit from further development. We are excited by the prospect of a university certificate in Historic Preservation, which would put MSU at the head of the curve in this field. We welcome the opportunity to work with students who might wish to attend our meetings or otherwise gain practical experience in how a growing municipality deals with historic preservation issues, both from a philosophical and a practical standpoint.

In sum, we offer our strong support for this effort, and we wish you success in an important endeavor that would benefit both the university and the city in very positive ways.

Sincerely,

Dr. Evan Peacock Chair Starkville Historic Preservation Commission 662-648-9255 Archaeopea1@gmail.com **APPROVAL FORM FOR**

DEGREE PROGRAMS

MISSISSIPPI STATE UNIVERSITY

NOTE: This form is a cover sheet that must accompany the degree program change proposal. The actual proposal should be prepared in accordance with format requirements provided in the *Guide and Format for Curriculum Proposals* published by the UCCC. Both cover sheet and proposal should be submitted to UCCC Mail Stop 9702 (281 Garner Hall), Phone: 325-9410.

College: Engineering School: Chemical Engineering

Contact Person: Julie JessopMail Stop: <u>9595</u>E-mail: jessop@che.msstate.eduNature of Change: Addition of Minor in Petroleum EngineeringDate Initiated: <u>9/1/2020</u>Effective Date: Spring 2021

New Degree Program Name: Minor in Petroleum Engineering

for Jason Keith

Minor: <u>Petroleum Engineering</u> Concentration: <u>N/A</u>

Summary of Proposed Changes: Currently, the School has a major in Petroleum Engineering (PTE). Engineering students would take seven (7) courses from the PTE program, a total of 21 hours. The plan is to offer this minor on Campuses 1 and 5.

Approved: Department Head

Chair, College or School Curriculum Committee

Date: <u>9/1/2020</u> 09/29/2020

9/29/2020

Dean of College or School

Chair, University Committee on Courses and Curricula

Chair, Graduate Council (if applicable)

Chair, Deans Council

NEW DEGREE OUTLINE FORM

PROPOSED New Degree

Degree: Undergraduate Minor in Petroleum Engineering

Major: Petroleum Engineering

Concentration: N/A

The minor in Petroleum Engineering consists of 7 courses for a total of 21 credit hours. Engineering undergraduate students enrolled at Mississippi State University may be admitted into the minor program during any semester (fall, spring, or summer). All hours earned in the Petroleum Engineering minor program must be taken at MSU. A minimum GPA of 2.5 is required in all courses in the minor program. The Undergraduate Coordinator for the Swalm School of Chemical Engineering will oversee all admission decisions.

Proposed Curriculum Outline	Required Hours
 Minor Courses: PTE 3953 – Petroleum Reservoir Rock Properties PTE 3903 – Petroleum Reservoir Fluid Properties PTE 3963 – Drilling PTE 3973 – Petroleum Production Operations PTE 4923 – Completion Design PTE 4903 – Petroleum Reservoir Engineering I Choose one of the following electives: PTE 4913 – Petroleum Reservoir Engineering II PTE 4953 – Formation Evaluation PTE 4963 – Oil Recovery Methods 	3 3 3 3 3 3 3 3 3
Total Hours	21

Justification (Campuses 1 and 5):

The petroleum engineering (PTE) program at Mississippi State University is housed in the Swalm School of Chemical Engineering and was reinstated in fall of 2015 after being suspended in 1995 due to budget cuts.¹ The program received accreditation by the Accreditation Board for Engineering & Technology in 2019 after graduating its first class of 11 students in Spring 2018. Enrollment in the PTE program has steadily increased with a total of 80 students in the major at present. In addition to being the only PTE program in Mississippi, the program draws students from surrounding states through the Accademic Common Market tuition scholarship program.

Through the creation of the PTE minor, the School of Chemical Engineering is seeking to strengthen the position of the PTE program so that it can more successfully weather the cyclical nature of the petroleum industry. Downturns in the petroleum industry (see Figure 1 below) result in decreased PTE program enrollment as students choose other majors such as chemical engineering or mechanical engineering that appear to offer a wider, steadier range of job opportunities during economic downturns and recessions. Indeed, enrollment declines during the 1990's recession were a contributing factor in the suspension of the original MSU PTE program.

Offering a PTE minor would better stabilize enrollment in core courses during an industrial downturn and increase enrollment during economic growth. Students who switch to other engineering majors because they are concerned about the PTE job outlook at the time of their anticipated graduation could still pursue significant coursework in their first choice of major. Students who are very interested in PTE but do not have the resources to commit to a dual major would have the option of a smaller suite of PTE courses that still result in a degree outcome. In addition, by specifying the coursework for the PTE minor, the PTE program would be able to keep enrollment in the space-limited laboratory classes for PTE majors only. Finally, the PTE minor provides a stepping stone for plans to continue growing the PTE program through creation of a certificate program targeted to practicing engineers who wish to expand their current career options to the oil and gas industry.

¹ <u>https://www.bagley.msstate.edu/news/mississippi-state-to-offer-states-only-petroleum-engineering-degree/</u>

International crude oil prices and global GDP growth

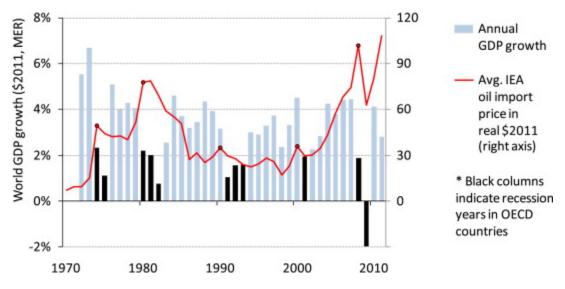


Figure 1. Illustration of the volatility in oil prices,² which impact hiring practices in the petroleum industry. Successive years of recession (black columns) have a negative impact on PTE program enrollments.

The School of Chemical Engineering is currently working on facilitating the offering of all PTE classes online. Thus, it is anticipated that the PTE minor coursework will eventually be offered on both Campuses 1 and 5. Once the PTE classes are available for distance learning, community college and other transfer students would be able to start taking PTE courses at MSU before coming to Campus 1 to complete their engineering major and PTE minor. Engineering students could also possibly take PTE coursework while on co-op assignment. Since PTE courses are only offered once a year, distance learning will enhance flexibility in completing the minor within an acceptable timeframe.

Student Learning Outcomes:

The general learning outcomes associated with the new minor will be:

- 1. Obtain knowledge of fluid and rock properties necessary for evaluation and management of oil and gas reservoirs.
- 2. Understand equipment, measurement, and data analysis used for formation evaluation, drilling, and oil and gas production.
- 3. Select and implement appropriate techniques for oil and gas recovery.

Support:

Please see the attached letter of support.

Proposed 4-letter Abbreviation:

Minor in Petroleum Engineering = MPTE

Effect Date:

Spring 2021

² https://www.sciencedirect.com/science/article/pii/S2211467X14000443



TO: BCoE CCRC and UCCC Committee Members

FROM: Petroleum Engineering Faculty Members

RE: Minor in Petroleum Engineering

DATE: August 28, 2020

Dear BCoE CCRC and UCCC Committee Members:

This letter of support is offered by the Program Faculty, Director, and Undergraduate Coordinator in the Swalm School of Chemical Engineering for the proposed program modifications. Specifically, the addition of a minor in Petroleum Engineering. As indicated by the signatures below, a majority of the program faculty have approved the proposal as written for submission to the BCoE CCRC and the UCCC.

Program Faculty:

Amin Amirlatifi, Ph.D.	Digitally signed by Amin Amirfatifi, Ph.D. Date: 2020.08.28 09:59:18 -05'00'	David Cole	Digitally signed by David Cole Date: 2020.09.01 09:21:51 -05'00'	
[Amin Amirlatifi, Ph.D.]		[David Cole, M.S.]		
Mohammad Heshmati	Digitally signed by Mohammad Heshmati Date: 2020,09.01 09:29:34 -05'00'	Maryan Mirakelykaseni	Digitally signed by Maryam Mirabolghasemi Date: 2020,08,28 09:25:09 -05'00'	
[Mohammad Heshmati, Ph.D.]		[Maryam Mirabolghasemi, Ph.D.]		
Bill B. Elmor	Digitally signed by Bill B. Emore Bit cardia B. Emore, artikinasiga State University, nuršanati Stanled of Demorshill Engineering, and tambin the state and a cuts Date: 2020 062 80 64131-65000			

[Bill Elmore, Ph.D., Director]

Sincerely,

Julie L. P. Jessop Digitally signed by Julie L. P. Jessop Date: 2020.08.28 08:53:21 -05'00'

[Julie Jessop, Ph.D., Undergraduate Coordinator]