A MEMORANDUM

DATE: April 1, 2024

TO: Academic Deans Council

FROM: Dr. Andy Perkins
UCCC Chair

RE: Change Notice 7

Listed below are curriculum change proposals which have been recommended by the University Committee Courses and Curricula. Under current procedure, members of the Academic Deans Council may question the approval of these proposals at any time prior to 5:00 p.m. on April 12, 2024 by contacting Dr. Andy Perkins (5-0004) or the office of the Vice President for Academic Affairs (5-3742). If no questions have been raised, the proposals will be considered approved automatically.

1. Course Proposals by college/school

AGRICULTURE AND LIFE SCIENCES

Modification	ABE 1912	**Passed Contingent**	**FROM: ABE 1912 Computer Based Problem Solving in Biosystems Engineering** (Open to freshmen and sophomores or first-semester transfer students only). One hour lecture, two hours laboratory. Introduction to computer-based problem-solving techniques in Biosystems Engineering. Emphasis on the concepts and hands on implementation of computer programing to solve problems in distinct disciplines of biosystems engineering. **TO: ABE 1912 Computational Problem Solving for Biological Systems** (Open to freshmen and sophomores or first-semester transfer students only). 1 hour lecture and 2 hours lab/week. Introduction to computer-based problem-solving techniques in Biosystems Engineering. Emphasis on the concepts and hands on implementation of computer programing to solve problems in distinct disciplines of biosystems engineering. Effective: Fall 2024
Modification	ABE 1922	**Approved**	**FROM: ABE 1922 Introduction to Engineering Design** (Prerequisite: ABE 1912). One hour lecture. Two hours laboratory. Introduction to the process of engineering design, including project management, computer-aided design, fabrication methods, technical writing and oral presentation. **TO: ABE 1922 Introduction to Design and Fabrication for Biological System** (Prerequisite: ABE 1912). One hour lecture. Two hours laboratory. Introduction to the process of engineering design, including project management, computer-aided design, fabrication methods, technical writing and oral presentation. 30 Char: Intro to Design for Bio Sys Effective: Fall 2024
Modification	ABE 3303	**Passed Contingent**	**FROM: ABE 3303 Transport in Biological Engineering** **TO: ABE 3303 Transport Phenomena in Biological Systems** Method of Delivery: F Campus: 1 30 Char: Transport in Bio Systems Effective: Fall 2024
Modification	ABE 3413	**Passed Contingent**	**FROM: ABE 3413 Bioinstrumentation I** (Prerequisite: PH 2223 or equivalent). Two hours lecture. Two hours laboratory. Applied circuit analysis, electrodes and transducers, stress and strain,

			temperature measurements, human physiology, digital and programmable instrumentation. **TO: ABE 3413 Electricity and Electronics in Biological Systems** (Prerequisite: PH 2223 or equivalent, or instructor's consent). Two hours lecture. Two hours laboratory. Applied circuit analysis, electrodes and transducers, stress and strain, temperature measurements, human physiology, digital and programmable instrumentation, include programming. Method of Delivery: F 30 Char: Elect & Electronics in Biosys Effective: Fall 2024
Modification	ABE 3813	**Passed Contingent**	**FROM: ABE 3813 Biophysical Properties of Materials** (Prerequisite: PH 2213). Two hours lecture . Two hours laboratory. Physical properties of biological products and materials. Primary emphasis on measurement and evaluation of dimensional, mechanical, rheological, transport, thermal, electrical, and optical properties. **TO: ABE 3813 Properties of Materials in Biological Systems** (Prerequisite: PH 2213). Two hours lecture . Two hours laboratory. Physical properties of biological products and materials. Primary emphasis on measurement and evaluation of dimensional, mechanical, rheological, transport, thermal, electrical, and optical properties. Method of Delivery: F Campus: 1 30 Char: Prop of Mat in Bio Systems Effective: Fall 2024
Modification	ABE 4423	**Approved**	**FROM: ABE 4423 Bioinstrumentation II** (Prerequisite: ABE 3413 or graduate standing). Two hours lecture. Two hours laboratory. Theory; application of automated measuring and control systems in biological sciences. Includes design/use of transducer interfaces; electronic signal conditioning; data logging; microprocessor based systems. **TO: ABE 4423 Measurement and Control in Biological Systems** (Prerequisite: ABE 3413 or graduate standing). Two hours lecture. Two hours laboratory. Theory; application of automated measuring and control systems in biological sciences. Includes design/use of transducer interfaces; electronic signal conditioning; data logging; microprocessor based systems. Method of Delivery: F Campus: 1 30 Char: Meas and Ctrl in Bio Systems Effective: Fall 2024

Modification	ABE 4433	**Approved**	**FROM: ABE 4433 Geospatial Computing for Biosystems Applications** (Prerequisite: Senior or graduate standing or consent of instructor). Two hours lecture. Two hours laboratory. Course provides conceptual/practical introduction to geospatial data analysis and programming language for biosystems applications. Course discusses multiple available data sources, image processing techniques, and data visualization/interpretation. Students develop proficiency in programming concepts. **TO: ABE 4433 Geospatial Computing for Biological Systems** (Prerequisite: Senior or graduate standing or consent of instructor). Two hours lecture. Two hours laboratory. Course provides conceptual/practical introduction to geospatial data analysis and programming language for biosystems applications. Course discusses multiple available data sources, image processing techniques, and data visualization/interpretation. Students develop proficiency in programming concepts. Effective: Fall 2024
Modification	ABE 4443	**Approved**	**FROM: ABE 4443 Spectroscopic Sensing in Biosystems** (Prerequisite: Junior or graduate standing or consent of instructor). Three hours lecture. A comprehensive introduction to spectroscopic techniques and analysis in biosystems. Discuss the electromagnetic spectrum and its interaction with matter, UV-Vis-IR spectroscopy, other spectroscopic techniques, Agricultural and Biomedical applications of spectroscopy, and spectroscopic data analysis. **TO: ABE 4443 Spectroscopic Sensing in Biological Systems** (Prerequisite: Junior or graduate standing or consent of instructor). Three hours lecture. A comprehensive introduction to spectroscopic techniques and analysis in biosystems. Discuss the electromagnetic spectrum and its interaction with matter, UV-Vis-IR spectroscopy, other spectroscopic techniques, Agricultural and Biomedical applications of spectroscopy, and spectroscopic data analysis. Method of Delivery: F Effective: Fall 2024
Modification	ABE 4803	**Approved**	**FROM: ABE 4803 Biosystems Simulation** Three hours lecture. Spring semester. Application of engineering analysis, modeling and simulation to biological systems. **TO: ABE 4803 Simulation in Biological Systems** Three hours lecture. Spring semester. Application of engineering analysis, modeling and simulation to biological systems. Method of Delivery: F Campus: 1

			30 Char: Simulation Biological Systems Effective: Fall 2024
Modification	ABE 4813	**Approved**	**FROM: ABE 4813 Principles of Engineering Design** (Prerequisite: senior standing in engineering) Two hours lecture. Two hours laboratory. First semester of the senior capstone design sequence. Students learn the fundamentals of the design process, select a design project, and complete a preliminary design. **TO: ABE 4813 Principles of Engineering Design for Biological Systems** (Prerequisite: senior standing in engineering) Two hours lecture. Two hours laboratory. First semester of the senior capstone design sequence. Students learn the fundamentals of the design process, select a design project, and complete a preliminary design. Campus: 1 30 Char: Prin of Engr Design Bio Sys Effective: Fall 2024
Modification	ABE 4833	**Passed Contingent**	**FROM: ABE 4833 Practices of Engineering Design** **TO: ABE 4833 Practice of Engineering Design for Biological Systems** Method of Delivery: F Campus: 1 30 Char: Prac of Engr Design Bio Sys Effective: Fall 2024
Modification	ADS 4633	**Approved**	**FROM: ADS 4633 Immunology and Disease in Large Livestock Species** (Prerequisite: ADS/VS3014). Three hours lecture. This course will cover common diseases in dairy cattle, beef cattle, and horses. Curriculum will include immunology, disease transfer, prevention methods, detection techniques, treatment options, and potential impacts on the animal, producer, and industry. **TO: ADS 4633 Immunology and Disease in Domestic Animals** (Prerequisite: ADS3013). ADS/VS3014).Three hours lecture. This course will cover common diseases in domestic animals. dairy cattle, beef cattle, and horses. Curriculum will include immunology, disease transfer, prevention methods, detection techniques, treatment options, and potential impacts on the animal, producer, and industry. 30 Char: Animal Immun. And Disease Effective: Summer 2024
Modification +Online/Distance	EPP 4263	**Approved**	**FROM: EPP 4263 Principles of Insect Pest Management** Two hours lecture. Two hours laboratory. Discussion of pest management concepts, insect control methods, sampling, and pest management systems. Laboratory involves sampling, calibration and other exercises related to pest management. **TO: EPP 4263 Principles of Insect Pest Management** Two hours lecture. Two hours laboratory. Discussion of

		pest management concepts, insect control methods, sampling, and pest management systems. Laboratory involves sampling, calibration, and other exercises related to pest management. Method of Instruction: B & K Method of Delivery: F & O Campus: 1 & 5 Effective: Fall 2024
Technical Change PSS 8343	**Approved**	**PSS 8343 Soil Plant Atmosphere Relationships** (Prerequisite: PSS 3301 and PSS 3303 or consent of instructor). Three-hour lecture on-line. Relationship of physical factors, water and heat, within the soil-plant-atmosphere continuum. Field-scale regimes including inputs, movement, and storage; emphasis on crop production. Method of Delivery: F & O Campus: 1 & 5 Effective: Fall 2024

ARTS AND SCIENCES

Addition AAS 3323	**Approved**	**AAS 3323 Writing Across Difference** (Prerequisite: EN 1113 or EN 1173) Three hours lecture. Examines the relationships among writing, power, and equity, investigating rhetorical practices that mediate, resolve, interrogate, and remake conflicts. (Same as EN 3323) Method of Instruction: C Method of Delivery: F Campus: 1 CIP: 239999 30 Char: Writing Across Difference Effective: Fall 2024
Modification AN 3343 +Online/Distance	**Tabled**	**AN 3343 Introduction to Forensic Anthropology**
Modification AN 4133 +Online/Distance	**Passed Contingent**	**FROM: AN 4133 Medical Anthropology** (Prerequisite: AN 1103 or consent of instructor). Three hours lecture. The cross-cultural study of health, sickness, and medicine from a holistic perspective emphasizing in- teractions between culture and biology and between bio- medicine and local healing traditions. **TO: AN 4133 Medical Anthropology** (Prerequisite: AN 1103 or consent of instructor). Three hours lecture. The cross-cultural study of health, sickness, and medicine from a holistic perspective emphasizing interactions between culture and biology and between bio-medicine and local healing traditions. Method of Delivery: F & O Campus: 1 & 5 Effective: Fall 2024
Addition AN 4393	**Passed Contingent**	**AN 4393 Skeletal Mechanics in Biological Anthropology** (Prerequisite: AN 4313) Three hours lecture. In-depth study of the mechanical behavior of

		living bone. This course discusses the morphology and function of bone tissue, the mechanical behavior of cortical and trabecular bone, the fatigue behavior of bone, and the response of living bone to mechanical loading. Method of Instruction: C Method of Delivery: F Campus: 1 CIP: 450201 30 Char: Skeletal Mechanics in Bio Anth Effective: Fall 2024
Addition AN 4543 +Online/Distance	**Passed Contingent**	**AN 4543 The Ancient Near East** (Prerequisite: Completion of any 1000-level history course). Three hours lecture. A study of the origins and development of civilizations in Mesopotamia, Egypt, and Syria-Palestine from prehistoric times to the end of the Persian period (Same as MEC/REL/HI 4403/6403). Method of Instruction: C Method of Delivery: F & O Campus: 1 & 5 CIP: 450201 30 Char: The Ancient Near East Effective: Fall 2024
Addition BIO 2013 +Online/Distance	**Approved**	**BIO 2013 African STEM Innovations** (Prerequisites: EN 1103, EN 1113, and sophomore standing). Three hours lecture. Discoveries by and contributions of Africans to life sciences, education, technology, and architecture from prehistory to present-day. Method of Instruction: C Method of Delivery: F & O Campus: 1 & 5 CIP: 260101 30 Char: African STEM Innovations Effective: Fall 2024
Addition BIO 4313	**Approved**	**BIO 4313 MCAT Prep** Three hours lecture. This course is designed to prepare students for the Medical College Admissions Test (MCAT). This is a P/F course. Method of Instruction: C Method of Delivery: F Campus: 1 CIP: 269999 30 Char: MCAT Prep Effective: Fall 2024
Addition CH 8603	**Passed Contingent**	**CH 8603 Core Concepts in Biophysical Chemistry** (Prerequisites: Graduate standing or consent of instructor) Three- hour lecture. A fast-paced, introductory Biophysical chemistry course for graduate students, the course emphasizes background knowledge of biochemical systems while discussing and applying concepts through current literature. Method of Instruction: C

			Method of Delivery: F Campus: 1 CIP: 400599 30 Char: Core Concepts Biophys. Chem. Effective: Fall 2024
Technical Change	CO 1542	**Approved**	**CO 1542 Technical Theatre Practicum** Number of times the course may be repeated: 4
Technical Change	CO 3541	**Approved**	**CO 3541 Theatre Performance Practicum** Number of times the course may be repeated: 4
Addition	EN 3323	**Approved**	**EN 3323 Writing Across Difference** (Prerequisite: EN 1113 or EN 1173) Three hours lecture. Examines the relationships among writing, power, and equity, investigating rhetorical practices that mediate, resolve, interrogate, and remake conflicts. (Same as AAS 3323) Method of Instruction: C Method of Delivery: F Campus: 1 CIP: 239999 30 Char: Writing Across Difference Effective: Fall 2024
Addition +Online/Distance	EN 4113	**Approved**	**EN 4113 Foundations of Technical Communication** (Prerequisite: EN 1113 or EN 1173 or graduate standing) Three hours lecture. A significant study of the techniques and strategies of technical communication. Emphasis on genre analysis, ethics, and design-thinking. Method of Instruction: C Method of Delivery: F & O Campus: 1 & 5 CIP: 231101 30 Char: Foundations of Tech Comm Effective: Fall 2024
Addition +Online/Distance	EN 6123	**Approved**	**EN 6123 Grant Writing** (Prerequisite: EN 1113 or EN 1173 or graduate standing) Three hours lecture. This course invites students to study and practice the principles of grant writing. Examines persuasion and genre as key strategies for effective grant development. Method of Instruction: C Method of Delivery: F & O Campus: 1 & 5 CIP: 231101 30 Char: Grant Writing Effective: Fall 2024
Addition +Online/Distance	GG 8103	**Approved**	**GG 8103 Geology and Geoheritage of National Parks** Three hours lecture. Investigation into geologic history, tectonics, processes and resulting landscapes, and geoheritage of US National Parks Method of Instruction: C Method of Delivery: O Campus: 5 CIP: 400699

			30 Char: Geology-Geoheritge Nat Parks Effective: Fall 2024
Addition +Online/Distance	GR 4373	**Tabled**	**GR 4373 Web GIS**
Modification +Online/Distance	MEC 4403	**Approved**	**FROM: MEC 4403 The Ancient Near East** (Prerequisite: Completion of any 1000-level history course). Three hours lecture. A study of the origins and development of civilizations in Mesopotamia, Egypt, and Syria-Palestine from prehistoric times to the end of the Persian period. (Same as HI 4403/6403 and REL 4403/6403). **TO: MEC 4403 The Ancient Near East** (Prerequisite: Completion of any 1000-level history course). Three hours lecture. A study of the origins and development of civilizations in Mesopotamia, Egypt, and Syria-Palestine from prehistoric times to the end of the Persian period (Same as REL/HI 4403/6403/ AN 4543/6543). Method of Delivery: F & O Campus: 1, 2, & 5 Effective: Fall 2024
Technical Change	PSY 8111	**Approved**	**FROM: PSY 8111 Scientist-Practitioner Applications** (Prerequisite: Consent of instructor). Two hours laboratory. A minimum of two hours per week in supervised service delivery and research activities of clinical psychologists. **TO: PSY 8111 Scientist-Practitioner Applications** (Prerequisite: Consent of instructor). One credit laboratory. Course also requires a minimum of two hours per week in supervised service delivery and research activities of clinical psychologists. Effective: Fall 2024
Technical Change	PSY 8121	**Approved**	**FROM: PSY 8121 Scientist-Practitioner Applications (**Prerequisite: Consent of instructor). Two hours laboratory. A minimum of two hours per week in supervised service delivery and research activities of clinical psychologists. **TO: PSY 8121 Scientist-Practitioner Applications** (Prerequisite: Consent of instructor). One credit lecture. Course also requires a minimum of two hours per week in supervised service delivery and research activities of clinical psychologists. Effective: Fall 2024
Technical Change	PSY 8131	**Approved**	**FROM: PSY 8131 Scientist-Practitioner Applications (**Prerequisite: Consent of instructor). Two hours laboratory. A minimum of two hours per week in supervised service delivery and research activities of clinical psychologists. **TO: PSY 8131 Scientist-Practitioner Applications** (Prerequisite: Consent of instructor). One credit lecture. Course also requires a minimum of two hours per week

			in supervised service delivery and research activities of clinical psychologists. Effective: Fall 2024
Technical Change	PSY 8141	**Approved**	**FROM: PSY 8141 Scientist-Practitioner Applications** (Prerequisite: Consent of instructor). Two hours laboratory. A minimum of two hours per week in supervised service delivery and research activities of clinical psychologists. **TO: PSY 8141 Scientist-Practitioner Applications** (Prerequisite: Consent of instructor). One credit lecture. Course also requires a minimum of two hours per week in supervised service delivery and research activities of clinical psychologists. Effective: Fall 2024
Technical Change	PSY 8151	**Approved**	**FROM: PSY 8151 Scientist-Practitioner Applications** (Prerequisite: Consent of instructor). Two hours laboratory. A minimum of two hours per week in supervised service delivery and research activities of clinical psychologists. **TO: PSY 8151 Scientist-Practitioner Applications** (Prerequisite: Consent of instructor). One credit lecture. Course also requires a minimum of two hours per week in supervised service delivery and research activities of clinical psychologists. Effective: Fall 2024
Addition +Online/Distance	ST 4223	**Approved**	**ST 4223 Gambling and Gaming** (Prerequisite: any introductory statistics course) Three hours lecture. This course investigates technical aspects of gambling and gaming. The theoretical underpinnings of all games of chance lie in probability theory. The rules of several games of chance will be examined, then statistical quantification of risk and reward are developed. Method of Instruction: C Method of Delivery: F & O Campus: 1 & 5 CIP: 270301 30 Char: Gambling and Gaming Effective: Fall 2024

BUSINESS

Modification	ACC 1001	**Approved**	**FROM: ACC 1001 First Year Seminar** One hour lecture. First-year seminars explore a diverse arrary of topics that provide students with an opportunity to learn about a specific discipline from skilled faculty members. **TO: ACC 1001 Introduction to the Accounting Major** One hour lecture. Introduction to the accounting curriculum, profession, and career opportunities. Concepts of the role of the student, department, college, and university will be introduced as well as the student's responsibility in those roles. College survival

		skills and student success will also be discussed in the course. Method of Delivery: F 30 Char: Intro to ACC Major Effective: Fall 2024
Addition ACC 8173 +Online/Distance	**Approved**	**ACC 8173 IT Audit, Control, and Data Analysis** (Prerequisites: Graduate Standing; ACC 4033). This course covers accounting information systems, including processing integrity, availability, security, confidentiality, and privacy. Emphasis will be placed on data management, data collection, storage and usage throughout the data life cycle, and information technology risk audits. Method of Instruction: C Method of Delivery: F & O Campus: 1 & 5 CIP: 520302 30 Char: IT Audit Effective: Fall 2024

EDUCATION

Addition COE 8003 +Online/Distance +Meridian	**Passed Contingent**	**COE 8003 Gambling & Gaming Addiction: Assessment and Treatment** Three hours lecture. Study of gambling and gaming addiction in multiple client populations to include assessment and treatment options. Method of Instruction: C Method of Delivery: F & O Campus: 1, 2, & 5 CIP: 420201 30 Char: Gambling and Gaming Addiction Effective: Fall 2024
Addition COE 8033 +Online/Distance +Meridian	**Passed Contingent**	**COE 8033 Diagnosis and Treatment of Sexual Addiction** Three hours lecture. Study of addictive sexual behaviors in multiple client populations to include assessment and treatment options for sexual addiction. Method of Instruction: C Method of Delivery: F & O Campus: 1, 2, & 5 CIP: 420201 30 Char: Dx Sexual Addiction Effective: Fall 2024
Addition COE 8103 +Online/Distance +Meridian	**Passed Contingent**	**COE 8103 Psychopharmacology and Addictions** Three hours lecture. Study of the pharmacology of substance disorders to include medication evaluations, medical intervention and medication-assisted therapy. Method of Instruction: C Method of Delivery: F & O Campus: 1, 2, & 5 CIP: 420201

			30 Char: Psychpharm and Addictions Effective: Fall 2024
Addition +Online/Distance +Meridian	COE 8663	**Approved**	**COE 8663 Ethical Practice in Telemental Health** Three hours lecture. This course focuses on ethical development, practices, and procedures for telemental health. Method of Instruction: C Method of Delivery: F & O Campus: 1, 2, & 5 CIP: 422899 30 Char: Ethics Telemental Health Effective: Summer 2024
Addition +Online/Distance +Meridian	COE 8733	**Approved**	**COE 8733 Trauma Counseling Interventions** Three hours lecture. Principles of psychological trauma and evidence-based techniques and interventions for addressing client trauma responses. Method of Instruction: C Method of Delivery: F & O Campus: 1, 2, & 5 CIP: 511508 30 Char: Trauma Clg Interventions Effective: Summer 2024
Modification	ED 8620	**Approved**	**FROM: ED 8620 Capstone Project in Education** (Prerequisites: Acceptance into a graduate degree program in Education; or permission of instructor). Hours and credits to be arranged, may be repeated. Students investigate a specific problem of practice and develop a final project appropriate to the subject area and graduate-level specific to the student. **TO: ED 8620 Capstone Project in Education** (Prerequisites: Acceptance into a graduate degree program in Education; or permission of instructor). 1-6 hours capstone project repeatable up to 6 hours. Students investigate a specific problem of practice and develop a final project appropriate to the subject area and graduate-level specific to the student. (Same as HSPY 8620) CIP: 440502 Effective: Summer 2024
Addition +Online/Distance +Meridian	HSPY 8620	**Approved**	**HSPY 8620 Capstone Project in Education** (Prerequisites: Acceptance into a graduate degree program in Education; permission of instructor). 1-6 hours capstone project repeatable up to 6 hours. Students investigate a specific problem of practice and develop a final project appropriate to the subject area and graduate-level specific to the student. (Same as ED 8620) Method of Instruction: D Method of Delivery: O Campus: 2 & 5 CIP: 420201

			30 Char: Capstone Project in Education Effective: Summer 2024
Addition	MU 4733	**Approved**	**MU 4733 Piano Performance Practice** (Prerequisite: Music majors (BA, BME, BMP) only, passed MU 3333, MU 3433, and MUA 3012). Three hours lecture. A historical study of how music was performed in the composer's time from earlier to later periods. Method of Instruction: C Method of Delivery: F Campus: 1 CIP: 500903 30 Char: Piano Performance Practice Effective: Fall 2024

ENGINEERING

Technical Change	CHE 3331	**Approved**	**FROM: CHE 3331 Professional Development Seminar** (Prerequisites: Chemical Engineering majors with Junior Standing).One hour lecture. A seminar focused on professional development and topics of interest/concern to the chemical engineering professional. (Same as PTE 3331). **TO: CHE 3331 Professional Development Seminar** (Prerequisites: CHE 3113). One hour lecture. A seminar focused on professional development and topics of interest/concern to the chemical engineering professional. (Same as PTE 3331). Effective: Fall 2024
Addition +Online/Distance +Gulf Coast	CIS 2713	**Approved**	**CIS 2713 System Administration** Three hours lecture. Topics include running Linux commands. Manage, organize, and secure files. Control and monitor services. Shell scripting and automation techniques. Manage storage devices, logical volumes, and file systems. Manage security and system access. Run containers. Method of Instruction: C Method of Delivery: F & O Campus: 1, 5, & 6 CIP: 111001 30 Char: System Administration Effective: Fall 2024
Addition +Online/Distance +Gulf Coast	CIS 3263	**Approved**	**CIS 3263 Web Application Security** (Prerequisites: CSE 2213 with a grade of C or better). Three hours lecture. Introduction to web application security and penetration testing, including the basics of software security, common vulnerabilities and attacks, and hands-on practice in both exploitation techniques and strategies for protecting and hardening applications. Method of Instruction: C Method of Delivery: F & O Campus: 1, 5, & 6

		CIP: 110101 30 Char: Web Application Security Effective: Fall 2024
Addition CIS 3613 +Online/Distance +Gulf Coast	**Approved**	**CIS 3613 Authorization & Accreditation** This course covers the most important concepts and processes of the security of an organization. Security program management and the Accreditation and Authorization (A&A) process. These programs evaluate the effectiveness and implementation of an organization's processes, policies, and security controls. Through security risk analysis models. Method of Instruction: C Method of Delivery: F Campus: 1, 2, & 5 CIP: 111003 30 Char: AUTHORIZATION & ACCREDITATION Effective: Fall 2024
Addition CIS 3713 +Online/Distance +Gulf Coast	**Approved**	**CIS 3713 IT Forensic** This course provides an introduction to the methodology and procedures associated with digital forensic analysis in a network environment. Students will develop an understanding of the fundamentals associated with the topologies, protocols, and applications required to conduct forensic analysis in a network environment. Students will learn about Method of Instruction: C Method of Delivery: F & O Campus: 1, 2, & 5 CIP: 111003 30 Char: IT Forensics Effective: Fall 2024
Addition CIS 4623 +Online/Distance +Gulf Coast	**Approved**	**CIS 4623 Cyber Risk Analysis** Understanding and applying Risk Analysis is the foundation of every facet of organizational operations. Cyber Risk Analysis focuses on understanding all of the components that make up an organization's risk profile. The components of Cyber Risk Analysis covered in this course are threats, vulnerabilities, operational and technical mitigation Method of Instruction: C Method of Delivery: F & O Campus: 1, 2, & 5 CIP: 111003 30 Char: Cyber Risk Analysis Effective: Fall 2024
Addition CIS 4783 +Online/Distance +Gulf Coast	**Approved**	**CIS 4783 Cloud Computing and Security** (Prerequisites: CSE 1384 with a grade of C or better) Three hours lecture. Topics include cloud architecture, service models, deployment modes, cloud security, storage and legal/privacy issues. Method of Instruction: C

			Method of Delivery: F & O Campus: 1, 5, & 6 CIP: 110101 30 Char: Cloud Computing and Security Effective: Fall 2024
Addition +Online/Distance +Gulf Coast	CIS 4813	**Approved**	**CIS 4813 Capstone Project I** (Prerequisites: CSE 3763 with a grade of C or better) Three-hour laboratory. Introduction to cybersecurity threats and vulnerabilities, risk assessment, security policies and procedures, and the development of incident response and disaster recovery plans. Method of Instruction: C Method of Delivery: F & O Campus: 1, 5, & 6 CIP: 110101 30 Char: Capstone Project I Effective: Fall 2024
Addition +Online/Distance +Gulf Coast	CIS 4823	**Approved**	**CIS 4823 Capstone Project II** (Prerequisites: CSE 3763 with a grade of C or better) Three-hour laboratory. Hands-on experience with security tools and techniques, penetration testing, implementation of security measures, and configuration management in a secure environment. Method of Instruction: C Method of Delivery: F & O Campus: 1, 5, & 6 CIP: 110101 30 Char: Capstone Project II Effective: Fall 2024
Addition +Online/Distance +Gulf Coast	CSE 3613	**Approved**	**CSE 3613 AI Capstone I** (Prerequisite: Grade of C or better in CSE 3683 and Senior standing) Three lecture hours. A major team-based AI application design and development will be undertaken. Project planning, application requirements analysis, and design of the AI system are part of this course. Includes Written reports and oral presentation. Method of Instruction: C Method of Delivery: F & O Campus: 1, 5, & 6 CIP: 110102 30 Char: AI Capstone I Effective: Fall 2024
Addition +Online/Distance +Gulf Coast	CSE 3623	**Approved**	**CSE 3623 AI Capstone II** (Prerequisite: CSE 3213 and senior standing) Three lecture hours. Continuation of CSE 3213. AI system implementation, testing, verification, and validation of results. Written reports and oral presentations in a technical setting. Method of Instruction: C Method of Delivery: F & O Campus: 1, 5, & 6 CIP: 110102

		30 Char: AI Capstone Project II Effective: Fall 2024
Addition CSE 3683 +Online/Distance +Gulf Coast	**Approved**	**CSE 3683 AI Fundamentals** (Prerequisite: Grade of C or better in CSE1384 or IE4933 and MA3113) Three lecture hours. Provides students with an introduction to the foundational concepts, techniques, and applications of Artificial Intelligence(AI). This course discusses the evolution of AI, problem-solving and search methods, knowledge representation, rule-base systems, machine learning. Method of Instruction: C Method of Delivery: F & O Campus: 1, 5, & 6 CIP: 110102 30 Char: AI Fundamentals Effective: Fall 2024
Addition CSE 8763 +Online/Distance +Gulf Coast	**Approved**	**CSE 8763 Distributed Computing** This course covers a number of topics from the area of distributed computing, including: peer-to-peer networks, wireless sensor networks, social networks, leader election, consensus, fault tolerance, and secure multiparty computation. Method of Instruction: C Method of Delivery: F & O Campus: 1, 5, & 6 CIP: 110101 30 Char: Distributed Computing Effective: Fall 2024
Modification IE 4914	**Approved**	**IE 4914 Industrial Systems Designs** (Prerequisite: Senior-standing and consent of instructor). Two hours lecture. Six hours laboratory. The fundamental procedures and techniques in design of operational systems. Emphasis on both sub-systems and total systems. Method of Delivery: F & O Effective: Fall 2024

FOREST RESOURCES

Technical Change FO 2113	**Approved**	**FROM: FO 2113 Dendrology** (Prerequisite: BIO 1144 or BIO 2113 or equivalent). Two hours lecture. Four hours laboratory. Introduction to the identification and systematic classification of trees and other woody plants. Field exercises to promote the recognition and identification of trees and other woody plants. **TO: FO 2113 Dendrology** (Prerequisite: BIO 1144 or BIO 2113). Two hours lecture. Four hours laboratory. Introduction to the identification and systematic classification of trees and other woody plants. Field exercises to promote the recognition and identification of trees and other woody plants. Effective: Fall 2024

Technical Change	FO 3003	**Approved**	**FROM: FO 3003 Internship in Forestry** (Prerequisite: Junior standing or consent of instructor). Professional work experience with firms or companies, non-governmental organizations, government agencies and other relevant entities. May be taken for credit up to four times but only once as a professional elective. **TO: FO 3003 Internship in Forestry** (Prerequisite: Consent of instructor). Professional work experience with firms or companies, non-governmental organizations, government agencies and other relevant entities. May be taken for credit up to four times but only once as a professional elective. Effective: Fall 2024
Technical Change	FO 3012	**Approved**	**FROM: FO 3012 Introduction to Forest Communities** (Prerequisites: PSS 3301, PSS 3303, FO 2113). Field exercises to gain practical knowledge of soil-geology-ecology interrelationships through trips to various physiographic regions. **TO: FO 3012 Introduction to Forest Communities** (Prerequisites: PSS 3303, FO 2113) Field exercises to gain practical knowledge of soil-geology-ecology interrelationships through trips to various physiographic regions. Effective: Summer 2024
Technical Change	FO 3103	**Approved**	**FROM: FO 3103 Computer Application in Forest Resources** (Prerequisite: Three hours of courses in College of Forest Resources or consent of instructor). Two hours lecture. Two hours laboratory. Application of computer concepts in forest resources with emphasis in forestry. Practice and demonstration of general and professional software packages used in upper level courses and professional settings. **TO: FO 3103 Computer Application in Forest Resources** Two hours lecture. Two hours laboratory. Application of computer concepts in forest resources with emphasis in forestry. Practice and demonstration of general and professional software packages used in upper-level courses and professional settings. Effective: Fall 2024
Technical Change	FO 4123	**Approved**	**FROM: FO 4123 Forest Ecology** Three hours lecture. Natural principles governing establishment, development, and functioning of forest ecosystems. Includes ecology, genetics, physiology, tree growth, reproduction, site, stand dynamics, energetics, hydrology, nutrition, and succession. **TO: FO 4123 Forest Ecology** (Prerequisite BIO 1144 or BIO 2113 or equivalent AND Junior standing; OR consent of instructor). Three hours lecture. Natural principles governing establishment, development, and functioning of forest ecosystems. Includes ecology, genetics, physiology, tree growth, reproduction, site,

		stand dynamics, energetics, hydrology, nutrition, and succession). Three hours lecture. Natural principles governing establishment, development, and functioning of forest ecosystems. Includes ecology, genetics, physiology, tree growth, reproduction, site, stand dynamics, energetics, hydrology, nutrition, and succession. Effective: Fall 2024
Technical Change FO 4213	**Approved**	**FROM: FO 4213 Forest Biometrics** (Prerequisite: ST 2113, FO 2213 or NREC 3213, or equivalent or consent of instructor). Three hours lecture. Applications of mensurational and statistical principles and techniques in determination of forest growth and yield. Advanced topics of forest resource inventory. **TO: FO 4213 Forest Biometrics** (Prerequisite: FO 2213 or NREC 3213). Three hours lecture. Applications of mensurational and statistical principles and techniques in determination of forest growth and yield. Advanced topics of forest resource inventory. Effective: Spring 2025
Technical Change FO 4233	**Approved**	**FROM: FO 4233 Forest Operations and Harvesting** (Prerequisites: FO 3015, FO 4231/6231, or consent of instructor). Three hours lecture. Study of practical, managerial, and logistic considerations associated with harvesting and other forest operations, as well as their social, environmental, and legal influences. **TO: FO 4233 Forest Operations and Harvesting** (Prerequisites: FO 4231/6231). Three hours lecture. Study of practical, managerial, and logistic considerations associated with harvesting and other forest operations, as well as their social, environmental, and legal influences. Effective: Fall 2024
Technical Change FO 4253	**Approved**	**FROM: FO 4253 Timber Procurement** (Prerequisites: FO 4231/6231, FO 4233/6233, or consent of instructor). Lectures and field exercises dealing with the problems of timber procurement to include planning for harvest, methods of handling and transport, legal and safety considerations. **TO: FO 4253 Timber Procurement** (Prerequisites: FO 4233/6233). Lectures and field exercises dealing with the problems of timber procurement to include planning for harvest, methods of handling and transport, legal and safety considerations. Effective: Spring 2025
Technical Change FO 4313/6313	**Approved**	**FROM: FO 4313/6313 Spatial Technologies in Natural Resources Management** (Prerequisite: FO 3015 or GR 2313 or consent of instructor). Three hours lecture. Three hours laboratory. Fundamentals of scale, area, height, and stand volume determinations from aerial imagery; planimetric and topographic mapping;

		image interpretation; GPS and GIS; applications to natural resources. (Same as NREC 4313). **TO: FO 4313/6313 Spatial Technologies in Natural Resources Management** (Prerequisite: FO 3015 or GR 2313). Three hours lecture. Three hours laboratory. Fundamentals of scale, area, height, and stand volume determinations from aerial imagery; planimetric and topographic mapping; image interpretation; GPS and GIS; applications to natural resources. (Same as NREC 4313). Effective: Fall 2024
Technical Change FO 4343	**Approved**	**FROM: FO 4343 Forest Administration and Organization** (Prerequisite: Junior standing or instructor consent). Three hours lecture. Hierarchy and land structuring of forest organizations. Legal aspects of administering forest land holdings. **TO: FO 4343 Forest Administration and Organization** (Prerequisite: Junior standing). Three hours lecture. Hierarchy and land structuring of forest organizations. Legal aspects of administering forest land holdings. Effective: Spring 2025
Technical Change FO 4353/6353	**Approved**	**FROM: FO 4353/6353 Natural Resource Law** (Perquisite:Junior standing or consent of instructor).Three hours lecture. A comprehensive study of the laws relating to natural resources and forestry with emphasis on tort law, real property law, environmental law, taxation law and contract law. (Same as NREC 4353). **TO: FO 4353/6353 Natural Resource Law** (Prerequisite: Junior standing). Three hours lecture. A comprehensive study of the laws relating to natural resources and forestry with emphasis on tort law, property law, environmental law, taxation law, and contract law (Same as NREC 4353). Effective: Fall 2024
Deletion FO 4443/6443	**Approved**	**FO 4443/6443 International Forest Resources and Trade** Effective: Spring 2024
Technical Change FO 4453/6453	**Approved**	**FROM: FO 4453/6453 Remote Sensing Applications** (Prerequisite: A basic image interpretation or mote sensing course or consent of instructor).Two hours lecture. Three hours laboratory. An introduction to remote sensing with emphasis on analysis and application of digital image data in inventory, monitoring, and management of renewable natural resources. **TO: FO 4453/6453 Remote Sensing Applications** (Prerequisite: FO 3015 or GR 2313). Two hours lecture. Three hours laboratory. An introduction to remote sensing with emphasis on analysis and application of

		digital image data in inventory, monitoring, and management of renewable natural resources. Effective: Fall 2024
Technical Change FO 4463/6463	**Approved**	**FROM: FO 4463/6463 Forest Hydrology and Watershed Management** (Prerequisite: PSS 3303, FO 3012, FO 4123/6123, or consent of instructor). Three hours lecture. Synthesis of current information on the fundamental properties and processes of forest soils, hydrology, and water quality with emphasis on watershed and ecosystem management factors. (Same as NREC 4463). **TO: FO 4463/6463 Forest Hydrology and Watershed Management** (Prerequisite: PSS 3303). Three hours lecture. Synthesis of current information on the fundamental properties and processes of forest soils, hydrology, and water quality with emphasis on watershed and ecosystem management factors. (Same as NREC 4463). Effective: Fall 2024
Technical Change FO 4473/6473	**Approved**	**FROM: FO 4473/6473 GIS for Natural Resource Management** (Prerequisite: Junior standing).Two hours lecture and three hours laboratory. Introduction to geographic information systems (GIS) with emphasis on collection, encoding, storage, retrieval, and analysis of spatial data for use in management of natural resources. **TO: FO 4473/6473 GIS for Natural Resource Management** (Prerequisite: FO 3015 or GR 2313). Two hours lecture and three hours laboratory. Introduction to geographic information systems (GIS) with emphasis on collection, encoding, storage, retrieval, and analysis of spatial data for use in management of natural resources. Effective: Fall 2024
Technical Change FO 4483/6483	**Approved**	**FROM: FO 4483/6483 Forest Soils** (Prerequisite: PSS 3303, FO 3012, FO 4123/6123, FO 4121/6121, or consent of instructor). Three hours lecture. Synthesize current information on fundamental properties and processes of forest soils with emphasis on applications to silviculture, soil conservation, and sustainable management of forested ecosystems. **TO: FO 4483/6483 Forest Soils** (Prerequisite: PSS 3303). Three hours lecture. Synthesize current information on fundamental properties and processes of forest soils with emphasis on applications to silviculture, soil conservation, and sustainable management of forested ecosystems. Effective: Fall 2024
Technical Change FO 4683/6683	**Approved**	**FROM: FO 4683/6683 Introduction to Urban and Community Forestry** Three hours lecture. Addresses urban forest management issues and opportunities as

		well as educational extension/outreach program strategies within the urban forest context. (Same as NREC 4683). **TO: FO 4683/6683 Introduction to Urban and Community Forestry** Prerequisite: Sophomore Standing. Three hours lecture. Addresses urban forest management issues and opportunities as well as educational extension/outreach program strategies within the urban forest context. (Same as NREC 4683). Effective: Fall 2024
Technical Change NREC 3213	**Approved**	**FROM: NREC 3213 Environmental Measurements** Two hours lecture. Three hours laboratory. Principles of inventory, sampling and analysis for measurements in environmental assessments. Field exercises provide practice in sampling methods, data collection, instrumentation, and analysis. **TO: NREC 3213 Environmental Measurements** (Prerequisite: PSS 3303, ST 2113 or equivalent). Two hours lecture. Three hours laboratory. Principles of inventory, sampling and analysis for measurements in environmental assessments. Field exercises provide practice in sampling methods, data collection, instrumentation, and analysis. Effective: Spring 2025
Technical Change NREC 4313	**Approved**	**FROM: NREC 4313 Spatial Technologies in Natural Resources Management** (Prerequisite: FO 3015 or GR 2313 or consent of instructor). Three hours lecture. Three hours laboratory. Fundamentals of scale, area, height, and stand volume determinations from aerial imagery; planimetric and topographic mapping; image interpretation; GPS and GIS; applications to natural resources. (Same as FO 4313). **TO: NREC 4313 Spatial Technologies in Natural Resources Management** (Prerequisite: FO 3015 or GR 2313). Three hours lecture. Three hours laboratory. Fundamentals of scale, area, height, and stand volume determinations from aerial imagery; planimetric and topographic mapping; image interpretation; GPS and GIS; applications to natural resources. (Same as FO 4313). Effective: Fall 2024
Technical Change NREC 4463	**Approved**	**FROM: NREC 4463 Forest Hydrology and Watershed Management** (Prerequisite: PSS 3303, FO 3012, FO 4123/6123, or consent of instructor). Three hours lecture. Synthesis of current information on the fundamental properties and processes of forest soils, hydrology, and water quality with emphasis on watershed and ecosystem management factors. (Same as FO 4463). **TO: NREC 4463 Forest Hydrology and Watershed Management** (Prerequisite: PSS 3303). Three hours

		lecture. Synthesis of current information on the fundamental properties and processes of forest soils, hydrology, and water quality with emphasis on watershed and ecosystem management factors. (Same as FO 4463). Effective: Fall 2024
Technical Change NREC 4683	**Approved**	**FROM: NREC 4683 Introduction to Urban and Community Forestry** Three hours lecture. Addresses urban forest management issues and opportunities as well as educational extension/outreach program strategies within the urban forest context. (Same as FO 4683). **TO: NREC 4683 Introduction to Urban and Community Forestry** Prerequisite: Sophomore Standing. Three hours lecture. Addresses urban forest management issues and opportunities as well as educational extension/outreach program strategies within the urban forest context. (Same as FO 4683). Effective: Fall 2024
Technical Change WFA 4223	**Approved**	**FROM: WFA 4223 Wildlife Plant Identification** (Prerequisite: BIO 1134 and BIO 1144 or equivalent). Two hours lecture. Four hours laboratory alternate weeks. Identification, taxonomy, ecology, and management of wildlife food and cover plants. **TO: WFA 4223 Wildlife Plant Identification** (Prerequisite: WFA 3133, FO 4123 or consent of instructor). Two hours lecture. Four hours laboratory alternate weeks. Identification, taxonomy, ecology, and management of vegetation beneficial to wildlife. Effective: Summer 2024

PROFESSIONAL AND CONTINUING STUDIES

Addition PCS 6313 +Online/Distance	**Approved**	**PCS 6313 Organizational Culture** This course explores the concept of organizational culture and how effective leadership can influence that culture. Method of Instruction: C Method of Delivery: O Campus: 5 CIP: 521003 30 Char: Organizational Culture Effective: Summer 2024
Addition PCS 6323 +Online/Distance	**Approved**	**PCS 6323 Effective Organizational Discourse** This course explores the concept of effective discourse within an organization. Method of Instruction: C Method of Delivery: O Campus: 5 CIP: 521003 30 Char: Effective Org Dis Effective: Summer 2024

Addition PCS 6333 +Online/Distance	**Approved**	**PCS 6333 The Dichotomies of Leadership** This course explores the concept of balance within leadership by evaluating common leadership dichotomies that leaders must constantly consider to be effective. Method of Instruction: C Method of Delivery: O Campus: 5 CIP: 521003 30 Char: The Dichotomies of Leadership Effective: Summer 2024
Addition PCS 6343 +Online/Distance	**Approved**	**PCS 6343 Foundations of Organizational Leadership** This course illustrates the power of personal accountability, building relationships, effective communication, proper prioritization of tasks, and empowering people to create a positive impact on organizations and their missions. Method of Instruction: C Method of Delivery: O Campus: 5 CIP: 521003 30 Char: Found of Org Lead Effective: Summer 2024

SHACKOULS HONORS COLLEGE

Addition HON 2283	**Approved**	**HON 2283 Who's the Monster** Three hours seminar. Students in this course will analyze works of fiction to explore how the enterprise of science aligns with human motivations to discover and advance. Method of Instruction: S Method of Delivery: F Campus: 1 CIP: 240103 30 Char: Who's the Monster Effective: Fall 2024

VETERINARY SCIENCE

Addition CVM 8131	**Approved**	**CVM 8131 Current Topics in Aquatic Animal Health** (Prerequisite: Either dual enrollment in the DVM-PhD program or veterinary graduate program). Seminar where students and faculty critically evaluate recent literature in aquatic animal health. Method of Instruction: S Method of Delivery: F Campus: 1 CIP: 512599 30 Char: Curr Top Aquat Anim Health Effective: Fall 2024

2. **Program Proposals by college/school:**

BUSINESS

Modification	**Degree:** MPA **Major:** Accounting	**Approved**	See proposal for list of revisions. Forwarded to Graduate Council
Modification	**Degree:** MTX **Major:** Taxation	**Approved**	See proposal for list of revisions. Forwarded to Graduate Council

EDUCATION

Technical Change	**Degree:** PhD	**Approved**	Suspend admissions Forwarded to Graduate Council
Modification	**Degree:** BS **Major:** Kinesiology	**Approved**	Addition of a required class.
Addition	**Degree:** Grad Certificate **Major:** Addiction Counseling	**Passed Contingent**	
Addition	**Degree:** Grad Certificate **Major:** Teach Mississippi	**Approved**	Establish a new graduate certificate as an alternate route licensure program. Approved by Graduate Council on 03/01/2024

ENGINEERING

Addition	**Degree:** BAS **Major:** Cybersecurity	**Approved**	Create a new BAS major in Cybersecurity to meet the needs of AAS graduates. Forwarded to Provost and President before submission to IHL.
Addition	**Degree:** MS **Major:** Engineering	**Passed Contingent**	
Addition	**Degree:** BS **Major:** Artificial Intelligence	**Approved**	Create a new BS in Artificial Intelligence. Forwarded to Provost and President before submission to IHL.

PROFESSIONAL AND CONTINUING STUDIES

Addition	**Degree:** Grad Certificate **Major:** Applied Leadership	**Approved**	Forwarded to Graduate Council

All of the proposals were approved with the exception of the following:

Proposals**

_____

_____

_____

Peter Liam Ryan

Dr. Peter L. Ryan
Executive Vice Provost for Academic Affairs

April 12th, 2024
Date

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: Business
Contact Person: Brad Lang
Nature of Change: Modification

Department: School of Accountancy
Mail Stop: 9588 **E-mail:** bl1129@msstate.edu
Date Initiated: January 2024

Current Degree Program Name: Master of Professional Accountancy (MPA)
Major: N/A
Concentration: N/A

Current Campus(es): Starkville, Distance

New Degree Program Name: Master of Professional Accountancy (MPA)
Major: N/A
Concentration: N/A

Effective Date: Summer 2024

Summary of Proposed Changes:

- Remove ACC 8043 Fraud Examination from required courses thereby reducing required courses to 12 credit hours
- Increase the accounting electives requirement from nine to 15 credit hours
- Update the list of accounting electives by removing classes no longer taught and adding recently approved courses
- Reduce the business electives to three credit hours
- Remove all prior minors and concentrations and add a concentration in accounting data analytics
- Formatting changes for clarity and to align with MTX Degree

Approved:	Date:
Chair, School Curriculum Committee	1/26/24
Department Head	1.26.24
Director of Academic Quality	1/29/24
Chair, College or School Curriculum Committee	1-30-24
Dean of College or School	1/31/2024
Chair, University Committee on Courses and Curricula	3/28/24
Chair, Graduate Council (if applicable)	
Chair, Deans Council	April 12th, 2024

1. CATALOG DESCRIPTION

   No changes to catalog description

2. CURRICULUM OUTLINE

   See table below.

3. JUSTIFICATION AND STUDENT LEARNING OUTCOMES

   Justifications
   ACC 8043 (Fraud Examination) is being removed from the curriculum. The accounting electives will increase to 15 hours. Although Fraud is still relevant, there is no need for an entire course that focuses on the subject. The relevant content in the fraud course will be covered in other courses such as Ethics in Accounting. The list of accounting electives was updated to remove classes that are no longer relevant and add courses that are more relevant to contemporary accounting topics. The business electives were reduced to three credit hours to allow for more accounting courses to be taken. This is important because it provides a broader coverage of content that will be tested on the new CPA exam. All minors were removed because students were not pursuing the minors due to the additional courses required. A concentration in accounting data analytics was added because it can be completed within the 30-hour curriculum.

   Requesting summer 2024 effective date as 90% of our students start the one-year program in the summer to graduate the following May.

   Student Learning Outcomes
   - Technical Competency: Students will demonstrate mastery of an advanced body of knowledge in accounting and business.
   - Critical Thinking: Students will be able to analyze and integrate information to solve problems and make business decisions.
   - Data Analysis Using Information Technology: Students will demonstrate proficiency in the use of information technology tools and concepts vital to productivity.
   - Communication: Students will demonstrate proficiency in written and spoken communication skills.
   - Ethics: Students will demonstrate an understanding of the ethical and legal ramifications of accounting decisions.

4. SUPPORT

   See below for the letter of support from the Adkerson School of Accountancy Curriculum Committee.

5. PROPOSED 4-LETTER ABBREVIATION

   N/A

6. EFFECTIVE DATE:

   Summer 2024

GRADUATE DEGREE MODIFICATION OUTLINE FORM

CURRENT Degree Description		PROPOSED Degree Description	
Degree: Master of Professional Accountancy Major: Concentrations:		Degree: Major: Concentrations:	
Degree descriptions does not change		Degree description does not change	
CURRENT CURRICULUM OUTLINE	Required Hours	**PROPOSED CURRICULUM OUTLINE**	Required Hours
Major Required Courses		Major Required Courses	
Required Accounting Courses (15 hours)		**Required Accounting Courses (12 hours)**	
ACC 6063 Income Tax II (if not taken as an undergraduate)	3	ACC 6063 Income Tax II (if not taken as an undergraduate)	3
ACC 8013 Seminar in Financial Accounting Theory	3	ACC 8013 Seminar in Financial Accounting Theory	3
ACC 8023 Advanced Managerial Accounting	3	ACC 8023 Advanced Managerial Accounting	3
ACC 8033 Assurance and Audit Analytics	3	ACC 8033 Assurance and Audit Analytics	3
ACC 8043 Fraud Examination and Data Analysis	*3*		
Accounting Electives (9 hours from the following courses):	*9*	**Accounting Electives (15 hours from the following courses):**	**15**
ACC 8053 Financial Accounting Policy ACC 8063 Research in Tax Practice and Procedures ACC 8073 Taxation of Corporations and Shareholders ACC 8093 Taxation of Partnerships, S Corporations, Trusts, and Estates *ACC 8113 Advanced Individual Taxation and Wealth Management* ACC 8123 Tax Topics *ACC 8183 International Accounting* *ACC XXXX*		ACC 8053 Financial Accounting Policy ACC 8063 Research in Tax Practice and Procedures ACC 8073 Taxation of Corporations and Shareholders ACC 8093 Taxation of Partnerships, S Corporations, Trusts, and Estates ACC 8123 Tax Topics **ACC 8143 Accounting Data Analytics** **ACC 8153 Ethics in Accounting** **ACC 8173 IT Audit, Control, and Data Analysis** **Any approved graduate-level accounting class.***	
Note: No more than nine hours of coursework in the 30-hour program may be at the 6000 level.			
		Business Electives (3 hours)	**3**
Business Electives:	*6*	**Select three hours of graduate-level business or accounting courses.**	
Select six hours of graduate-level business or accounting courses.		**Note: No more than nine hours at the 6000-level can count toward the degree.** ***ACC 8213 Financial and Accounting Reporting Analysis is not approved.**	
Graduate Minor in Accounting Data Analytics (9 credit hours in total)		**Concentration in Accounting Data Analytics (9 credit hours in total)**	
In lieu of 6 hours of graduate-level business or accounting courses, a student may elect a Graduate Minor in Accounting Analytics by selecting the two courses below:		**A student may elect a Concentration in Accounting Data Analytics by selecting the following courses as part of their accounting and business electives:**	
ACC 8143: Accounting Data Analytics *BIS 8413: Data Analytics*		**ACC 8143: Accounting Data Analytics** **ACC 8173 IT Audit, Control, and Data Analysis** **BIS 8413: Data Analytics**	

Concentration in Systems (9 credit hours in total) *In lieu of 6 hours of graduate-level business or accounting courses, a student may elect a concentration in systems by selecting the two courses below:* *BIS 8213* Advanced Systems Analysis and Design* *BIS 8313 Advanced Database Design Administration* *Any approved course for the concentration.* **Programming prerequisites may be required.* *Graduate Minor in Business Analytics (9 credit hours in total)* *In lieu of 6 hours of graduate-level business or accounting courses, a student may elect a Graduate Minor in Business Analytics by selecting the two courses below:* *BIS 8413 Data Analytics* *BQA 6413 Business Forecasting and Predictive Analytics* *Any approved course for the minor.*			
Total Hours	30	Total Hours	30

MISSISSIPPI STATE UNIVERSITY

COLLEGE OF BUSINESS
Richard C. Adkerson School of Accountancy
P.O. Box EF
Mississippi State, MS 39762-5661
P. 662.325.3710
F. 662.325.1646
business.msstate.edu/accounting

January 4, 2024

University Committee on Courses and Curricula
Mississippi State University
281 Garner Hall
Mississippi State, MS 39762

Committee Members:

The faculty of the Adkerson School of Accountancy support the following changes related to our graduate programs:

- The creation of a new course- ACC 8173– IT Audit, Control, and Data Analysis
- Regarding the Master of Professional Accountancy (MPA):
  - Remove ACC 8043 Fraud Examination from required courses thereby reducing required courses to 12 credit hours
- Regarding the Master of Taxation (MTX):
  - Remove ACC 8113 Advanced Individual Taxation from required courses thereby reducing required courses to 12 credit hours
- For both the MPA and MTX:
  - Increase the accounting electives requirement from nine to 15 credit hours
  - Update the list of accounting electives by removing classes no longer taught and adding recently approved courses
  - Reduce the business electives to three credit hours
  - Remove all prior minors and concentrations and add a concentration in accounting data analytics
  - Formatting changes for clarity and to align degree programs

Shawn Mauldin, Director 1/4/24

Nathan Berglund

Casey Camors 1/9/24

Nick Cicone

Laurie Ereddia

Bradley Lang 1/4/24

Lauren Milbach 1/5/24

Angela Pannell

Allie Pilgrim

Kyle Smith 1/5/24

Alan Stancil

Michael Truelson

Kelly Walker

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: Business
Contact Person: Brad Lang
Nature of Change: Modification

Department: School of Accountancy
Mail Stop: 9588 **E-mail:** bl1129@msstate.edu
Date Initiated: January 2024

Current Degree Program Name: Master of Taxation (MTX)
Major: N/A
Concentration: N/A

Current Campus(es): Starkville, Distance

New Degree Program Name: Master of Taxation (MTX)
Major: N/A
Concentration: N/A

Effective Date: Summer 2024

Summary of Proposed Changes:

- Remove ACC 8113 Advanced Individual Taxation from required courses thereby reducing required courses to 12 credit hours
- Increase the accounting electives requirement from nine to 15 credit hours
- Update the list of accounting electives by removing classes no longer taught and adding recently approved courses
- Reduce the business electives to three credit hours
- Remove all prior minors and concentrations and add a concentration in accounting data analytics
- Formatting changes for clarity and to align with MPA Degree

Approved:	**Date:**
Chair, School Curriculum Committee	1/26/24
Department Head	1.26.24
Director of Academic Quality	1/29/24
Chair, College or School Curriculum Committee	1-30-24
Dean of College or School	1/31/2024
Chair, University Committee on Courses and Curricula	3/28/24
Chair, Graduate Council (if applicable)	
Chair, Deans Council	April 12th, 2024

1. CATALOG DESCRIPTION

   No changes to catalog description

2. CURRICULUM OUTLINE

   See table below.

3. JUSTIFICATION AND STUDENT LEARNING OUTCOMES

   Justifications
   ACC 8113 (Advanced Individual Taxation) is being removed from the Master of Tax (MTX) curriculum. Although some topics in ACC 8113 are still relevant, there is no need for an entire course that focuses on the subject. The relevant content in ACC 8113 will be covered in other tax courses. This change will result in the accounting electives being increased to 15 hours. The list of accounting electives is updated to remove classes that are no longer relevant and add courses that are more relevant to contemporary accounting tax topics. The business electives were reduced to three credit hours to allow for more accounting courses to be taken. This is important because it provides broader coverage of content that will be tested on the new CPA exam. All minors were removed because students were not pursuing the minors because of the additional courses required. A concentration in accounting data analytics was added because it can be completed within the 30-hour curriculum. These changes align the MTX degree with the Master of Professional Accountancy (MPA) degree as far as the number of required courses, accounting elective courses, and business electives.

   Requesting summer 2024 effective date as 90% of our students start the one-year program in the summer to graduate the following May.

   Student Learning Outcomes
   - Technical Competency: Students will demonstrate mastery of an advanced body of knowledge in taxation, accounting, and business.
   - Critical Thinking: Students will be able to analyze and integrate information to solve problems and make business decisions.
   - Data Analysis Using Information Technology: Students will demonstrate proficiency in the use of information technology tools and concepts vital to productivity.
   - Communication: Students will demonstrate proficiency in written and spoken communication skills.
   - Ethics: Students will demonstrate an understanding of the ethical and legal ramifications of accounting decisions.

4. SUPPORT

   See below for the letter of support from the Adkerson School of Accountancy Curriculum Committee.

5. PROPOSED 4-LETTER ABBREVIATION
   N/A

6. EFFECTIVE DATE:
   Summer 2024

GRADUATE DEGREE MODIFICATION OUTLINE FORM

CURRENT Degree Description		PROPOSED Degree Description	
Degree: Master of Professional Accountancy Major: Concentrations:		Degree: Major: Concentrations:	
Degree descriptions does not change		Degree description does not change	
CURRENT CURRICULUM OUTLINE	Required Hours	**PROPOSED CURRICULUM OUTLINE**	Required Hours
Major Required Courses		Major Required Courses	
Required Courses (15 hours)		**Required Courses (12 hours)**	
ACC 8063 Research in Tax Practice and Procedures	3	ACC 8063 Research in Tax Practice and Procedures	3
ACC 8073 Taxation of Corporations and Shareholders	3	ACC 8073 Taxation of Corporations and Shareholders	3
ACC 8093 Taxation of Partnerships, S Corporations, Trusts, and Estates	3	ACC 8093 Taxation of Partnerships, S Corporations, Trusts, and Estates	3
ACC 8113 Advanced Individual Taxation and Wealth Management	*3*	ACC 8123 Tax Topics	3
ACC 8123 Tax Topics	3		
		Accounting Electives: (15 hours from the following)	**15**
Electives: (Choose 3 of the following courses)	*9*		
		ACC 8013 Seminar in Financial Accounting Theory	
ACC 8013 Seminar in Financial Accounting Theory		**ACC 8023 Advanced Managerial**	
ACC 8033 Assurance and Audit Analytics		ACC 8033 Assurance and Audit Analytics	
ACC 8043 Fraud Examination and Data Analysis		ACC 8053 Financial Accounting Policy	
ACC 8053 Financial Accounting Policy		**ACC 8143 Accounting Data Analytics**	
		ACC 8153 Ethics in Accounting	
		ACC 8173 IT Audit, Control, and Data Analysis	
Any approved graduate-level accounting or business course	*6*	**Any approved graduate-level accounting class.***	
Note: No more than nine hours of coursework in the 30-hour program may be at the 6000 level.		**Business Electives (3 hours)**	**3**
		Select three hours of graduate-level business or accounting courses.	
Graduate Minor in Accounting Data Analytics (9 credit hours in total)		**Note: No more than nine hours at the 6000-level can count toward the degree.**	
In lieu of 6 hours of graduate-level business or accounting courses, a student may elect a Graduate Minor in Accounting Data Analytics by selecting the two courses below:		***ACC 8213 Financial and Accounting Reporting Analysis is not approved.**	
		Concentration in Accounting Data Analytics (9 credit hours in total)	
ACC 8043 Fraud Examination and Data Analysis		**A student may elect a Concentration in Accounting Data Analytics by selecting the following courses as part of their accounting and business electives:**	
ACC 8143: Accounting Data Analytics			
BIS 8413: Data Analytics		**ACC 8143: Accounting Data Analytics**	
		ACC 8173 IT Audit, Control, and Data Analysis	
Concentration in Systems (9 credit hours in total)		**BIS 8413: Data Analytics**	
In lieu of 6 hours of graduate-level			

business or accounting courses, a student may elect a concentration in systems by selecting the two courses below: *BIS 8213* Advanced Systems Analysis and Design* *BIS 8313 Advanced Database Design Administration* *Any approved course for the concentration.* **Programming prerequisites may be required.* *Graduate Minor in Business Analytics (9 credit hours in total)* *In lieu of 6 hours of graduate-level business or accounting courses, a student may elect a Graduate Minor in Business Analytics by selecting the two courses below:* *BIS 8413 Data Analytics* *BQA 6413 Business Forecasting and Predictive Analytics* *Any approved course for the minor.*			
Total Hours	30	Total Hours	30

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January 4, 2024

University Committee on Courses and Curricula
Mississippi State University
281 Garner Hall
Mississippi State, MS 39762

Committee Members:

The faculty of the Adkerson School of Accountancy support the following changes related to our graduate programs:

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  - Reduce the business electives to three credit hours
  - Remove all prior minors and concentrations and add a concentration in accounting data analytics
  - Formatting changes for clarity and to align degree programs

Shawn Mauldin, Director 1/4/24

Nathan Berglund

Casey Camors 1/9/24

Nick Cicone

Laurie Ereddia

Bradley Lang 1/4/24

Lauren Milbach 1/5/24

Angela Pannell

Allie Pilgrim

Kyle Smith 1/5/24

Alan Stancil

Michael Truelson

Kelly Walker

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: Education **Department:** Ind Tech, Instructional Des, & Comm College Leader

Contact Person: John Wyatt **Mail Stop:** 9730 **E-mail:** wyatt@colled.msstate.edu
Nature of Change: Technical Change **Date Initiated:** 02/09/2024

Current Degree Program Name: Doctor of Philosophy

Current Major: Instructional Systems & Workforce Development

Current Concentration: N/A

Current Campus: Starkville, Online

New Degree Program Name: N/A **Effective Date:** Upon Approval

Proposed Major: N/A

Proposed Concentration: N/A **Proposed Campus:** N/A

Summary of Proposed Changes:
Internally suspend admission to the PhD program in Instructional Systems and Workforce Development for Campus 1 and 5 for approximately 1 year.

Approved: **Date:**

John Wyatt
John Wyatt (Feb 9, 2024 16:53 CST)
Department Head

Director of Academic Quality

Chair, College or School Curriculum Committee	
Kim Hall (Feb 9, 2024 16:45 CST) Dean of College or School	
Chair, University Committee on Courses and Curricula	March 28, 2024
Chair, Graduate Council (if applicable)	
Chair, Deans Council	April 12th, 2024

Degree Program Suspension – Internal

PhD, Instructional Systems & Workforce Development

The PhD degree in Instructional Systems and Workforce Development currently admits students to both Campus 1 and Campus 5. This proposal is to internally suspend admission to both campuses for approximately 1 year, while the curriculum is revised.

Plan for Current Students

There are currently 62 students enrolled in the PhD degree program in Instructional Systems and Workforce Development. Twenty-four (24) of these students are enrolled in dissertation hours with an additional 9 students taking the course just prior to dissertation (TECH 9913 Dissertation Seminar). These students will continue to enroll in dissertation hours as they complete their dissertation.

Twenty-nine (29) students still need to complete additional coursework. Courses will continue to be offered until each of these students graduate.

Impact

Technology is an ever-changing field. In order to design a program that meets the needs of current students, faculty need time to spend on developing new courses and a new curriculum that will recruit highly qualified students to enter the field. While continuing to work with the 62 currently enrolled students, faculty will be able to start focusing on curriculum design by internally suspending admission to the doctoral program. The program is too large for faculty to be able to adequately mentor students while also designing an updated doctoral degree curriculum. Students currently enrolled have primary catalog term dates ranging from 2011 to 2023, with 24% being admitted prior to 2020. It is imperative that faculty work towards graduating these students before admitting more students.

Effective Date

Upon Approval

MISSISSIPPI STATE UNIVERSITY

COLLEGE OF EDUCATION
Department of Industrial Technology, Instructional Design, and Community College Leadership
P.O. Box 9730
108 Herbert Street
Industrial Education Building
Mississippi State, MS 39762
P. 662.325.2281

February 12, 2024

Dr. Perkins:

On February 7, 2024, faculty met to discuss the status of the PhD degree program in Instructional Systems and Workforce Development. The program currently has over 60 enrolled students but has only graduated 3 students in 3 years. We have decided to internally suspend admissions to the program until faculty have carefully reviewed current issues within the program and proposed a satisfactory plan of improvement.

Respectfully,

Dr. John Wyatt
Associate Professor – Industrial Technology
Interim Department Head
Tel: (662) 325 7257
Email: wyatt@colled.msstate.edu

Dr. Teresa Jayroe
Dean College of Education
Tel: (662) 325 7069
Email: TJayroe@colled.msstate.edu

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: College of Education **Department:** Department of Kinesiology

Contact Person: Zachary Gillen **Mail Stop:** **E-mail:** zmg43@msstate.edu
Nature of Change: Curriculum change **Date Initiated:** 1/31/2024
Effective Date: Summer 2024
Current Degree Program Name: Bachelor of Science in Kinesiology

Major: Kinesiology **Concentration(s):** Physical Education and Coaching, Neuromechanics, Strength and Conditioning, Clinical Exercise Physiology, Sport Administration, Physical Activity and Coaching

New Degree Program Name: Bachelor of Science in Kinesiology

Major: Kinesiology **Concentration(s):** Physical Education and Coaching, Neuromechanics, Strength and Conditioning, Clinical Exercise Physiology, Sport Administration, Physical Activity and Coaching

Summary of Proposed Changes:
This proposal is to add EP 4813 as a required concentration class and specify the mission, goals, and outcomes of the Strength and Conditioning concentration to meet compliance with the Council of Accreditation of Strength and Conditioning Education requirements of accredited programs.

Approved:	Date:
JohnEric Smith Digitally signed by JohnEric Smith Date: 2024.01.31 16:53:57 -06'00'	
Department Head	
	2/8/2024
Director of Academic Quality	
	2/2/2024
Chair, College or School Curriculum Committee	
Kimberly R. Hall Digitally signed by Kimberly R. Hall Date: 2024.02.02 16:52:21 -06'00'	
Dean of College or School	
	3/28/24
Chair, University Committee on Courses and Curricula	
Chair, Graduate Council(if applicable)	
	April 12th, 2024
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 *italics* 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 Major: Kinesiology Concentration: Strength and Conditioning	Degree: Bachelor of Science Major: Kinesiology Concentration: Strength and Conditioning
The Department of Kinesiology offers five undergraduate concentrations: Physical Education and Coaching (PEC), Neuromechanics (NM), Strength and Conditioning (SC), Clinical Exercise Physiology (CLEP), and Sport Administration (SA). Community college transfer hours not to exceed 62 semester hours may be applied to the Kinesiology degree program. All concentrations require the specified course requirements cited within the General Education and major core listings below. Specified area content courses vary among the five concentrations and are listed following the core section. Pre-Occupational Therapy and Pre-Physical Therapy curricula have different core and program requirements. Students electing to pursue Pre-OT or Pre-PT should consult their advisor.	The Department of Kinesiology offers five undergraduate concentrations: Physical Education and Coaching (PEC), Neuromechanics (NM), Strength and Conditioning (SC), Clinical Exercise Physiology (CLEP), and Sport Administration (SA). Community college transfer hours not to exceed 62 semester hours may be applied to the Kinesiology degree program. All concentrations require the specified course requirements cited within the General Education and major core listings below. Specified area content courses vary among the five concentrations and are listed following the core section. Pre-Occupational Therapy and Pre-Physical Therapy curricula have different core and program requirements. Students electing to pursue Pre-OT or Pre-PT should consult their advisor.
The physical education and coaching concentration requires 124 semester hours of prescribed courses to complete the Bachelor of Science in Kinesiology. The curriculum is designed to meet the need of students interested in becoming physical education teachers in public and private schools. The teaching block of courses must be included in the on-campus requirement of 32 semester hours of junior and senior courses. Students who complete the program will be eligible for teacher licensure by the Mississippi Department of Education. The Neuromechanics concentration requires 124 semester hours of prescribed courses to complete a Bachelor of Science in Kinesiology. The Neuromechanics concentration combines the disciplines of "neuroscience" and "biomechanics" and deals with the study of human movement accomplished by the interaction of the nervous, muscular, and skeletal systems of the human body. Students learn concepts of the neuromechanical basis of kinesiology in the development, learning, control, and production of human movement. This enhances their knowledge and understanding of neural, biomechanical, cognitive, and behavioral mechanisms underlying human movements to help improve performance and prevent	The physical education and coaching concentration requires 124 semester hours of prescribed courses to complete the Bachelor of Science in Kinesiology. The curriculum is designed to meet the need of students interested in becoming physical education teachers in public and private schools. The teaching block of courses must be included in the on-campus requirement of 32 semester hours of junior and senior courses. Students who complete the program will be eligible for teacher licensure by the Mississippi Department of Education. The Neuromechanics concentration requires 124 semester hours of prescribed courses to complete a Bachelor of Science in Kinesiology. The Neuromechanics concentration combines the disciplines of "neuroscience" and "biomechanics" and deals with the study of human movement accomplished by the interaction of the nervous, muscular, and skeletal systems of the human body. Students learn concepts of the neuromechanical basis of kinesiology in the development, learning, control, and production of human movement. This enhances their knowledge and understanding of neural, biomechanical, cognitive, and behavioral mechanisms underlying human movements to help improve performance and prevent injuries in a variety of populations ranging from recreational, athletic, occupational, geriatric, and special

injuries in a variety of populations ranging from recreational, athletic, occupational, geriatric, and special populations such as Downs' syndrome, autism, and Parkinson's disease. The curriculum provides students a foundation in the mechanisms underlying human movement to prepare them for careers in physical therapy, occupational therapy, medicine/physician assistance, neuromechanics, human factors ergonomics, sport science, and disability and rehabilitation science. Students in and desiring admission into the Department of Kinesiology's Neuromechanics concentration will be required to have and maintain a minimum MSU GPA of 2.50. In addition, an overall MSU GPA of 2.50 is required for graduation from the Neuromechanics concentration. The Strength and Conditioning concentration provides students with the necessary knowledge to incorporate exercise physiology concepts into activates that enhance fitness and performance. This concentration covers everything from the development of plans to enhance fitness in apparently healthy populations to improving performance in elite athletes. Strength and Conditioning takes into consideration a combination of the physiological, biomechanical, and psychological aspects of training in the development of individual and team needs for customized programming. The concentration serves as the foundation for students to become sport scientists, strength and conditioning coaches, personal trainers, and specialists within corporate fitness/wellness programs. Students in and desiring admission into the Department of Kinesiology's Strength and Conditioning concentration will be required to have and maintain a minimum MSU GPA of 2.50. In addition, an overall MSU GPA of 2.50 is required for graduation from the Strength and Conditioning concentration. The clinical exercise physiology concentration is designed as a professional preparation program of study that enables students to work in clinical settings as exercise physiologists in cardiac and pulmonary rehabilitation, or other clinical rehabilitation settings, such as those for individuals with diabetes, orthopedic limitations, arthritis, cancer, osteoporosis, renal failure, obesity, and in programs dealing with issues of aging. The clinical exercise physiology concentration also provides students with the necessary background to pursue graduate health professions, such as physical or occupational therapy, physician assistant studies, medicine, or other graduate level educational programs.	populations such as Downs' syndrome, autism, and Parkinson's disease. The curriculum provides students a foundation in the mechanisms underlying human movement to prepare them for careers in physical therapy, occupational therapy, medicine/physician assistance, neuromechanics, human factors ergonomics, sport science, and disability and rehabilitation science. Students in and desiring admission into the Department of Kinesiology's Neuromechanics concentration will be required to have and maintain a minimum MSU GPA of 2.50. In addition, an overall MSU GPA of 2.50 is required for graduation from the Neuromechanics concentration. The **mission of the** Strength and Conditioning concentration provides students with the necessary knowledge to incorporate exercise physiology concepts into activities that enhance fitness and performance. This concentration covers everything from the development of plans to enhance fitness in apparently healthy populations to improving performance in elite athletes. Strength and Conditioning takes into consideration a combination of the physiological, biomechanical, and psychological aspects of training in the development of individual and team needs for customized programming. The concentration serves as the foundation for students to become sport scientists, strength and conditioning coaches, personal trainers, and specialists within corporate fitness/wellness programs. **The goals of this concentration are to prepare students to take the Certified Strength and Conditioning Specialist (CSCS) exam through the National Strength and Conditioning Association and to prepare them for careers in the strength and conditioning industry. To monitor this, the Department of Kinesiology publishes the following outcomes: pass rates for the CSCS exam and placement, graduation, and retention rates for students who graduated from the Strength and Conditioning concentration.** Students in and desiring admission into the Department of Kinesiology's Strength and Conditioning concentration will be required to have and maintain a minimum MSU GPA of 2.50. In addition, an overall MSU GPA of 2.50 is required for graduation from the Strength and Conditioning concentration. The clinical exercise physiology concentration is designed as a professional preparation program of study that enables students to work in clinical settings as exercise physiologists in cardiac and pulmonary rehabilitation, or other clinical rehabilitation settings, such as those for individuals with diabetes, orthopedic limitations, arthritis, cancer, osteoporosis, renal failure, obesity, and in programs dealing with issues of aging. The clinical exercise physiology concentration also provides students

Students in and desiring admission into the Department of Kinesiology's Clinical Exercise Physiology concentration will be required to have and maintain a minimum MSU GPA of 2.50. In addition, an overall MSU GPA of 2.50 is required for graduation from the Clinical Exercise Physiology concentration. The Sport Administration concentration provides students with knowledge and skills necessary for careers in the sport industry. A concentration in Sport Administration helps prepare students to work in such fields as sport marketing & promotions, sporting event and/or facility management & operations, sport communication & media relations, and other administrative areas at the professional, collegiate, and recreational levels of the industry. The program seeks to combine classroom education with hands-on experience, as all students will complete an internship in the sport industry prior to graduation. Students choosing a concentration in Sport Administration choose either the Business, Communication, or Foreign Language cognate field. The Physical Activity and Coaching concentration provides students with the knowledge, skills, and opportunities to fulfill their educational needs and interests in recreation and sports coaching through quality academic coursework, student centered focus, and experiential-based learning and faculty expertise. This program integrates coaching and recreation courses to prepare students with necessary tools after graduation. The Physical Activity and Coaching major also provides students with the opportunity to engage in a professional internship related to their chosen field of study and/or sport area. Upon graduation, students will have many opportunities to select their careers in Physical Activity and Coaching. These include but not limited to park and tourism, recreation camp organizations, YMCA and YWCA facilities, parks at the local, state, and national levels, youth sports coaching (AAU, club teams, etc), and intercollegiate sports coaching.	with the necessary background to pursue graduate health professions, such as physical or occupational therapy, physician assistant studies, medicine, or other graduate level educational programs. Students in and desiring admission into the Department of Kinesiology's Clinical Exercise Physiology concentration will be required to have and maintain a minimum MSU GPA of 2.50. In addition, an overall MSU GPA of 2.50 is required for graduation from the Clinical Exercise Physiology concentration. The Sport Administration concentration provides students with knowledge and skills necessary for careers in the sport industry. A concentration in Sport Administration helps prepare students to work in such fields as sport marketing & promotions, sporting event and/or facility management & operations, sport communication & media relations, and other administrative areas at the professional, collegiate, and recreational levels of the industry. The program seeks to combine classroom education with hands-on experience, as all students will complete an internship in the sport industry prior to graduation. Students choosing a concentration in Sport Administration choose either the Business, Communication, or Foreign Language cognate field. The Physical Activity and Coaching concentration provides students with the knowledge, skills, and opportunities to fulfill their educational needs and interests in recreation and sports coaching through quality academic coursework, student centered focus, and experiential-based learning and faculty expertise. This program integrates coaching and recreation courses to prepare students with necessary tools after graduation. The Physical Activity and Coaching major also provides students with the opportunity to engage in a professional internship related to their chosen field of study and/or sport area. Upon graduation, students will have many opportunities to select their careers in Physical Activity and Coaching. These include but not limited to park and tourism, recreation camp organizations, YMCA and YWCA facilities, parks at the local, state, and national levels, youth sports coaching (AAU, club teams, etc), and intercollegiate sports coaching.

CURRENT PHYSICAL ACTIVITY AND COACHING CONCENTRATION (PECO) CURRICULUM OUTLINE	Required Hours	**CURRENT PHYSICAL ACTIVITY AND COACHING CONCENTRATION (PECO) CURRICULUM OUTLINE**	Required Hours
English (General Education) EN 1103 English Composition I or EN 1104 Expanded English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	6	English (General Education) EN 1103 English Composition I or EN 1104 Expanded English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	6
Fine Arts (General Education): PE 1323 History and Appreciation of	3	Fine Arts (General Education): PE 1323 History and Appreciation of Dance	3

Dance (or other Gen. Ed. Fine Arts)		(or other Gen. Ed. Fine Arts)	
Sciences BIO 1134 Biology I (or other Gen. Ed. 4 hr BIO Natural Sci) CH 1213 & CH 1211 Chemistry I and Investigations in Chemistry I (or other Gen. Ed. 4 hr CH natural sci) Natural Science BIO 1004 suggested or other Gen. Ed. Natural Sci	11-12	Sciences BIO 1134 Biology I (or other Gen. Ed. 4 hr BIO Natural Sci) CH 1213 & CH 1211 Chemistry I and Investigations in Chemistry I (or other Gen. Ed. 4 hr CH natural sci) Natural Science BIO 1004 suggested or other Gen. Ed. Natural Sci	11-12
Math (General Education): MA 1313 College Algebra (or higher) ST 2113 Introduction to Statistics	6	Math (General Education): MA 1313 College Algebra (or higher) ST 2113 Introduction to Statistics	6
Humanities (General Education): Choose 1 Gen. Ed. Humanities Choose 1 Gen. Ed. Humanities	6	Humanities (General Education): Choose 1 Gen. Ed. Humanities Choose 1 Gen. Ed. Humanities	6
Social/Behavioral Sciences (Gen Ed): PSY 1013 General Psychology (or other Gen. Ed. Social/Behavioral Sci) SO 1003 Introduction to Sociology (or other Gen. Ed. Social/Behavioral Sci)	6	Social/Behavioral Sciences (Gen Ed): PSY 1013 General Psychology (or other Gen. Ed. Social/Behavioral Sci) SO 1003 Introduction to Sociology (or other Gen. Ed. Social/Behavioral Sci)	6
Major Core Courses EP 3304 Exercise Physiology PE 1243 Methods of Teaching Games and Sports PE 1253 Methods of Teaching Lifetime Activities PE 1263 Methods of Teaching Rhythms PE 3133 Adapted Physical Education PE 3153 Methods of Elementary Physical Education PE 3223 Motor Development and Movement PE 3533 Coaching Sports PE 4533 Developing Coaching Expertise PE 4283 Sport Biomechanics	31	Major Core Courses EP 3304 Exercise Physiology PE 1243 Methods of Teaching Games and Sports PE 1253 Methods of Teaching Lifetime Activities PE 1263 Methods of Teaching Rhythms PE 3133 Adapted Physical Education PE 3153 Methods of Elementary Physical Education PE 3223 Motor Development and Movement PE 3533 Coaching Sports PE 4533 Developing Coaching Expertise PE 4283 Sport Biomechanics	31
Kinesiology Core Courses PE 1000 Play, Fitness & Physical Activity (or any 2 PE activity courses) PE 3163 Sport Psychology EP 2013 Fundamentals of Kinesiology EP 3233 Anatomical Kinesiology	11	Kinesiology Core Courses PE 1000 Play, Fitness & Physical Activity (or any 2 PE activity courses) PE 3163 Sport Psychology EP 2013 Fundamentals of Kinesiology EP 3233 Anatomical Kinesiology	11
Select one of the following: KI 3273 Athletic Training KI 2213 Emergency Health Care	3	Select one of the following: KI 3273 Athletic Training KI 2213 Emergency Health Care	3
Professional Education Courses EDF 3333 Social Foundations of Education EDX 3213 Individualizing Instruction for Exceptional Children	6	Professional Education Courses EDF 3333 Social Foundations of Education EDX 3213 Individualizing Instruction for Exceptional Children	6
Courses Required for Admission into	21	Courses Required for Admission into	21

Teacher Ed PE 4163 Principles and Methods of Secondary School Health and Physical Education PE 4173 Tests and Measurements in Health and Physical Education PE 4853 Motor Learning and Skill Analysis PE 4883 School Health Education EPY 3143 Human Development and Learning Strategies in Education EPY 3253 Evaluating Learning EDF 4243 Planning for the Diversity of Learners		Teacher Ed PE 4163 Principles and Methods of Secondary School Health and Physical Education PE 4173 Tests and Measurements in Health and Physical Education PE 4853 Motor Learning and Skill Analysis PE 4883 School Health Education EPY 3143 Human Development and Learning Strategies in Education EPY 3253 Evaluating Learning EDF 4243 Planning for the Diversity of Learners	
Final Semester: Teaching Internship PE 4873 Professional Classroom Management Seminar in Physical Education and Athletics PE 4886 Teaching Internship in Physical Education PE 4896 Teaching Internship in Physical Education	15	Final Semester: Teaching Internship PE 4873 Professional Classroom Management Seminar in Physical Education and Athletics PE 4886 Teaching Internship in Physical Education PE 4896 Teaching Internship in Physical Education	15
Total Hours	124	Total Hours	124
CURRENT NEUROMECHANICS CONCENTRATION (NRMC) CURRICULUM OUTLINE	Required Hours	**CURRENT NEUROMECHANICS CONCENTRATION (NRMC) CURRICULUM OUTLINE**	Required Hours
English (Ex: EN 1103 English Comp I): EN 1103 English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	6	English (Ex: EN 1103 English Comp I): EN 1103 English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	6
Fine Arts (General Education): Any Gen Ed course	3	Fine Arts (General Education): Any Gen Ed course	3
Natural Sciences (2 labs required from Gen Ed): Biology BIO 1134 or other four credit hour approved Gen Ed BIO Lab Science course above or equivalent Chemistry CH 1213/1211 or other four credit hour approved Gen Ed CH Lab Science course above or equivalent	8	Natural Sciences (2 labs required from Gen Ed): Biology BIO 1134 or other four credit hour approved Gen Ed BIO Lab Science course above or equivalent Chemistry CH 1213/1211 or other four credit hour approved Gen Ed CH Lab Science course above or equivalent	8
Natural Science (if appropriate) Suggest BIO 1004 or other Gen. Ed. Natural Sci	3	Natural Science (if appropriate) Suggest BIO 1004 or other Gen. Ed. Natural Sci	3
Math (General Education): MA 1313 College Algebra (or higher) ST 2113 Introduction to Statistics	6	Math (General Education): MA 1313 College Algebra (or higher) ST 2113 Introduction to Statistics	6
Humanities (General Education): Any Gen Ed course(s)	6	Humanities (General Education): Any Gen Ed course(s)	6
Social/Behavioral Sciences (Gen Ed): PSY 1013 General Psychology (or other approved Gen Ed course) SO 1003 Introduction to Sociology (or other approved Gen Ed course)	6	Social/Behavioral Sciences (Gen Ed): PSY 1013 General Psychology (or other approved Gen Ed course) SO 1003 Introduction to Sociology (or other approved Gen Ed course)	6

Exercise Science Core Courses KI 2023 Foundations of Health Education EP 3304 Exercise Physiology EP 3643 Applied Anatomy and Pathophysiology EP 4113 Fitness Programs and Testing Procedures EP 4183 Exercise and Weight Control EP 4504 Mechanical Analysis of Movement EP 4603 Physical Activity Epidemiology EP 4814 Exercise Science Internship	27	Exercise Science Core Courses KI 2023 Foundations of Health Education EP 3304 Exercise Physiology EP 3643 Applied Anatomy and Pathophysiology EP 4113 Fitness Programs and Testing Procedures EP 4183 Exercise and Weight Control EP 4504 Mechanical Analysis of Movement EP 4603 Physical Activity Epidemiology EP 4814 Exercise Science Internship	27
Kinesiology Core Courses PE 1000 Play, Fitness & Physical Activity (or any 3 PE activity courses) SS 4003 Philosophy of Sport & Physical Activity or SS 4303 Globalization and Sport or PE 3163 Sport Psychology or EP 3183 Exercise Psychology EP 2013 Fundamentals of Kinesiology EP 3233 Anatomical Kinesiology	12	Kinesiology Core Courses PE 1000 Play, Fitness & Physical Activity (or any 3 PE activity courses) SS 4003 Philosophy of Sport & Physical Activity or SS 4303 Globalization and Sport or PE 3163 Sport Psychology or EP 3183 Exercise Psychology EP 2013 Fundamentals of Kinesiology EP 3233 Anatomical Kinesiology	12
Neuromechanics Concentration Courses PE 3223 Motor Development & Movement PE 4283 Sport Biomechanics PE 4853 Motor Learning & Skill Analysis EP 4143 Aging and Disability EP 4703 Neural Control of Human Movement	15	Neuromechanics Concentration Courses PE 3223 Motor Development & Movement PE 4283 Sport Biomechanics PE 4853 Motor Learning & Skill Analysis EP 4143 Aging and Disability EP 4703 Neural Control of Human Movement	15
Electives See advisor for approved list of courses	15	Electives See advisor for approved list of courses	15
Additional Requirements BIO 3004 Human Anatomy (or equivalent Gen Ed Bio/Lab Science course) BIO 3014 Human Physiology (or equivalent Gen Ed Bio/Lab Science course) KI 2603 Medical Terminology	11	Additional Requirements BIO 3004 Human Anatomy (or equivalent Gen Ed Bio/Lab Science course) BIO 3014 Human Physiology (or equivalent Gen Ed Bio/Lab Science course) KI 2603 Medical Terminology	11
Oral Communication Requirement CO 1003 Fundamentals of Public Speaking or CO 1013 Introduction to Communication or CO 2253 Fundamentals of Interpersonal Communication	3	Oral Communication Requirement CO 1003 Fundamentals of Public Speaking or CO 1013 Introduction to Communication or CO 2253 Fundamentals of Interpersonal Communication	3
Computer Literacy Requirement Satisfied by successful completion of EP 4803		Computer Literacy Requirement Satisfied by successful completion of EP 4803	
Writing Requirement EDF 3413 Writing for Thinking or MGT 3213 Organizational Communications or BIO 3013 Professional Writing for Biologists	3	Writing Requirement EDF 3413 Writing for Thinking or MGT 3213 Organizational Communications or BIO 3013 Professional Writing for Biologists	3

Total Hours	124	Total Hours	124
CURRENT STRENGTH AND CONDITOINING CONCENTRATION (SC) CURRICULUM OUTLINE	Required Hours	**CURRENT STRENGTH AND CONDITOINING CONCENTRATION (SC) CURRICULUM OUTLINE**	Required Hours
English (Ex: EN 1103 English Comp I): EN 1103 English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	6	English (Ex: EN 1103 English Comp I): EN 1103 English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	6
Fine Arts (General Education): Any Gen Ed course	3	Fine Arts (General Education): Any Gen Ed course	3
Natural Sciences (2 labs required from Gen Ed): Biology BIO 1134 or other four credit hour approved Gen Ed BIO Lab Science course above or equivalent Chemistry CH 1213/1211 or other four credit hour approved Gen Ed CH Lab Science course above or equivalent	8	Natural Sciences (2 labs required from Gen Ed): Biology BIO 1134 or other four credit hour approved Gen Ed BIO Lab Science course above or equivalent Chemistry CH 1213/1211 or other four credit hour approved Gen Ed CH Lab Science course above or equivalent	8
Natural Science (if appropriate) Suggest BIO 1004 or other Gen. Ed. Natural Sci.	3	Natural Science (if appropriate) Suggest BIO 1004 or other Gen. Ed. Natural Sci.	3
Math (General Education): MA 1313 College Algebra (or higher) ST 2113 Introduction to Statistics	6	Math (General Education): MA 1313 College Algebra (or higher) ST 2113 Introduction to Statistics	6
Humanities (General Education): Any Gen Ed course(s)	6	Humanities (General Education): Any Gen Ed course(s)	6
Social/Behavioral Sciences (Gen Ed): PSY 1013 General Psychology (or other approved Gen Ed course) SO 1003 Introduction to Sociology (or other approved Gen Ed course)	6	Social/Behavioral Sciences (Gen Ed): PSY 1013 General Psychology (or other approved Gen Ed course) SO 1003 Introduction to Sociology (or other approved Gen Ed course)	6
Exercise Science Core Courses KI 2023 Foundations of Health Education EP 3304 Exercise Physiology EP 3643 Applied Anatomy and Pathophysiology EP 4113 Fitness Programs and Testing Procedures EP 4183 Exercise and Weight Control EP 4504 Mechanical Analysis of Movement EP 4603 Physical Activity Epidemiology EP 4814 Exercise Science Internship	27	Exercise Science Core Courses KI 2023 Foundations of Health Education EP 3304 Exercise Physiology EP 3643 Applied Anatomy and Pathophysiology EP 4113 Fitness Programs and Testing Procedures EP 4183 Exercise and Weight Control EP 4504 Mechanical Analysis of Movement EP 4603 Physical Activity Epidemiology EP 4814 Exercise Science Internship	27
Kinesiology Core Courses PE 1000 Play, Fitness & Physical Activity (or any 3 PE activity courses) SS 4003 Philosophy of Sport & Physical Activity or SS 4303 Globalization and Sport or PE 3163 Sport Psychology or EP 3183 Exercise Psychology EP 2013 Fundamentals of Kinesiology EP 3233 Anatomical Kinesiology	12	Kinesiology Core Courses PE 1000 Play, Fitness & Physical Activity (or any 3 PE activity courses) SS 4003 Philosophy of Sport & Physical Activity or SS 4303 Globalization and Sport or PE 3163 Sport Psychology or EP 3183 Exercise Psychology EP 2013 Fundamentals of Kinesiology EP 3233 Anatomical Kinesiology	12
Strength and Conditioning Concentration Courses	*15*	Strength and Conditioning Concentration Courses	**18**

FNH 4223 Sports Nutrition PE 3313 Sport Physiology EP 4153 Training Techniques for Exercise and Sport PE 4283 Sport Biomechanics PE 4533 Developing Coaching Expertise		FNH 4223 Sports Nutrition PE 3313 Sport Physiology EP 4153 Training Techniques for Exercise and Sport PE 4283 Sport Biomechanics PE 4533 Developing Coaching Expertise **EP 4813 Strength and Conditioning Practicum**	
Electives See advisor for approved list of courses	*15*	Electives See advisor for approved list of courses	**12**
Additional Requirements BIO 3004 Human Anatomy (or equivalent Gen Ed Bio/Lab Science course) BIO 3014 Human Physiology (or equivalent Gen Ed Bio/Lab Science course) KI 2603 Medical Terminology	11	Additional Requirements BIO 3004 Human Anatomy (or equivalent Gen Ed Bio/Lab Science course) BIO 3014 Human Physiology (or equivalent Gen Ed Bio/Lab Science course) KI 2603 Medical Terminology	11
Oral Communication Requirement CO 1003 Fundamentals of Public Speaking or CO 1013 Introduction to Communication or CO 2253 Fundamentals of Interpersonal Communication	3	Oral Communication Requirement CO 1003 Fundamentals of Public Speaking or CO 1013 Introduction to Communication or CO 2253 Fundamentals of Interpersonal Communication	3
Computer Literacy Requirement Satisfied by successful completion of EP 4803		Computer Literacy Requirement Satisfied by successful completion of EP 4803	
Writing Requirement EDF 3413 Writing for Thinking or MGT 3213 Organizational Communications or BIO 3013 Professional Writing for Biologists	3	Writing Requirement EDF 3413 Writing for Thinking or MGT 3213 Organizational Communications or BIO 3013 Professional Writing for Biologists	3
Total Hours	124	Total Hours	124
CURRENT CLINICAL EXERCISE PHYSIOLOGY CONCENTRATION (CLEP) CURRICULUM OUTLINE	Required Hours	**CURRENT CLINICAL EXERCISE PHYSIOLOGY CONCENTRATION (CLEP) CURRICULUM OUTLINE**	Required Hours
English (Ex: EN 1103 English Comp I): EN 1103 English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	6	English (Ex: EN 1103 English Comp I): EN 1103 English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	6
Fine Arts (General Education): Any Gen Ed course	3	Fine Arts (General Education): Any Gen Ed course	3
Natural Sciences (2 labs required from Gen Ed): Biology BIO 1134 or other four credit hour approved Gen Ed BIO Lab Science course above or equivalent Chemistry CH 1213/1211 or other four credit hour approved Gen Ed CH Lab Science course above or equivalent	8	Natural Sciences (2 labs required from Gen Ed): Biology BIO 1134 or other four credit hour approved Gen Ed BIO Lab Science course above or equivalent Chemistry CH 1213/1211 or other four credit hour approved Gen Ed CH Lab Science course above or equivalent	8
Natural Science (if appropriate) Any Gen Ed Natural Science course	3	Natural Science (if appropriate) Any Gen Ed Natural Science course	3
Math (General Education): MA 1313 College Algebra (or higher) ST 2113 Introduction to Statistics	6	Math (General Education): MA 1313 College Algebra (or higher) ST 2113 Introduction to Statistics	6

Humanities (General Education): Any Gen Ed course(s)	6	Humanities (General Education): Any Gen Ed course(s)	6
Social/Behavioral Sciences (Gen Ed): PSY 1013 General Psychology (or other approved Gen Ed course) SO 1003 Introduction to Sociology (or other approved Gen Ed course)	6	Social/Behavioral Sciences (Gen Ed): PSY 1013 General Psychology (or other approved Gen Ed course) SO 1003 Introduction to Sociology (or other approved Gen Ed course)	6
Exercise Science Core Courses KI 2023 Foundations of Health Education EP 3304 Exercise Physiology EP 3643 Applied Anatomy and Pathophysiology EP 4113 Fitness Programs and Testing Procedures EP 4183 Exercise and Weight Control EP 4504 Mechanical Analysis of Movement EP 4603 Physical Activity Epidemiology EP 4814 Exercise Science Internship	27	Exercise Science Core Courses KI 2023 Foundations of Health Education EP 3304 Exercise Physiology EP 3643 Applied Anatomy and Pathophysiology EP 4113 Fitness Programs and Testing Procedures EP 4183 Exercise and Weight Control EP 4504 Mechanical Analysis of Movement EP 4603 Physical Activity Epidemiology EP 4814 Exercise Science Internship	27
Kinesiology Core Courses PE 1000 Play, Fitness & Physical Activity (or any 3 PE activity courses) SS 4003 Philosophy of Sport & Physical Activity or SS 4303 Globalization and Sport or PE 3163 Sport Psychology or EP 3183 Exercise Psychology EP 2013 Fundamentals of Kinesiology EP 3233 Anatomical Kinesiology	12	Kinesiology Core Courses PE 1000 Play, Fitness & Physical Activity (or any 3 PE activity courses) SS 4003 Philosophy of Sport & Physical Activity or SS 4303 Globalization and Sport or PE 3163 Sport Psychology or EP 3183 Exercise Psychology EP 2013 Fundamentals of Kinesiology EP 3233 Anatomical Kinesiology	12
Clinical Exercise Physiology Concentration Courses EP 3613 Exercise Electrocardiography EP 3803 Advanced Exercise Physiology EP 4123 Aging and Physical Activity EP 4133 Exercise Programs for Clinical Populations EP 4143 Aging and Disability	15	Clinical Exercise Physiology Concentration Courses EP 3613 Exercise Electrocardiography EP 3803 Advanced Exercise Physiology EP 4123 Aging and Physical Activity EP 4133 Exercise Programs for Clinical Populations EP 4143 Aging and Disability	15
Electives See advisor for approved list of courses	15	Electives See advisor for approved list of courses	15
Additional Requirements BIO 3004 Human Anatomy (or equivalent Gen Ed Bio/Lab Science course) BIO 3014 Human Physiology (or equivalent Gen Ed Bio/Lab Science course) KI 2603 Medical Terminology	11	Additional Requirements BIO 3004 Human Anatomy (or equivalent Gen Ed Bio/Lab Science course) BIO 3014 Human Physiology (or equivalent Gen Ed Bio/Lab Science course) KI 2603 Medical Terminology	11
Oral Communication Requirement CO 1003 Fundamentals of Public Speaking or CO 1013 Introduction to Communication or CO 2253 Fundamentals of Interpersonal Communication	3	Oral Communication Requirement CO 1003 Fundamentals of Public Speaking or CO 1013 Introduction to Communication or CO 2253 Fundamentals of Interpersonal Communication	3
Computer Literacy Requirement Satisfied by successful completion of EP		Computer Literacy Requirement Satisfied by successful completion of EP	

4803		4803	
Writing Requirement EDF 3413 Writing for Thinking or MGT 3213 Organizational Communications or BIO 3013 Professional Writing for Biologists	3	Writing Requirement EDF 3413 Writing for Thinking or MGT 3213 Organizational Communications or BIO 3013 Professional Writing for Biologists	3
Total Hours	124	Total Hours	124
CURRENT SPORT ADMINISTRATION CNOCENTRATION (SPAD) CURRICULUM OUTLINE	Required Hours	**CURRENT SPORT ADMINISTRATION CNOCENTRATION (SPAD) CURRICULUM OUTLINE**	Required Hours
English (General Education) EN 1103 English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	6	English (General Education) EN 1103 English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	6
Fine Arts (General Education): PE 1323 History and Appreciation of Dance (or any approved Fine Arts Gen Ed course)	3	Fine Arts (General Education): PE 1323 History and Appreciation of Dance (or any approved Fine Arts Gen Ed course)	3
Natural Sciences BIO 1004 Anatomy and Physiology Any 3-4 hour Gen Ed lab science course	8	Natural Sciences BIO 1004 Anatomy and Physiology Any 3-4 hour Gen Ed lab science course	8
Extra Science Any Gen Ed Natural Science course	3	Extra Science Any Gen Ed Natural Science course	3
Math (General Education): MA 1313 College Algebra (or higher) MA 1613 Calculus for Business and Life Sciences I	6	Math (General Education): MA 1313 College Algebra (or higher) MA 1613 Calculus for Business and Life Sciences I	6
Humanities (General Education): PHI 1123 Introduction to Ethics (or other approved Humanities Gen Ed course) See Gen Ed course list for an additional 3 hour course	6	Humanities (General Education): PHI 1123 Introduction to Ethics (or other approved Humanities Gen Ed course) See Gen Ed course list for an additional 3 hour course	6
Social/Behavioral Sciences (Gen Ed): SO 1003 Introduction to Sociology EC 2113 Principles of Macroeconomics	6	Social/Behavioral Sciences (Gen Ed): SO 1003 Introduction to Sociology EC 2113 Principles of Macroeconomics	6
Kinesiology Core Courses EP 2013 Fundamentals of Kinesiology PE 1000 Play, Fitness & Physical Activity (or any 3 PE activity courses) SS 4003 Philosophy of Sport & Physical Activity or SS 4303 Globalization and Sport or PE 3163 Sport Psychology or EP 3183 Exercise Psychology EP 3233 Anatomical Kinesiology	12	Kinesiology Core Courses EP 2013 Fundamentals of Kinesiology PE 1000 Play, Fitness & Physical Activity (or any 3 PE activity courses) SS 4003 Philosophy of Sport & Physical Activity or SS 4303 Globalization and Sport or PE 3163 Sport Psychology or EP 3183 Exercise Psychology EP 3233 Anatomical Kinesiology	12
Concentration Courses SS 2003 Foundations of Sport Industry SS 2103 Sport Careers and Practicum SS 3103 Sport Sponsorship SS 3203 Sport Law SS 3403 Facility and Event Management in Sport SS 4103 Ethics in Sport Management	30	Concentration Courses SS 2003 Foundations of Sport Industry SS 2103 Sport Careers and Practicum SS 3103 Sport Sponsorship SS 3203 Sport Law SS 3403 Facility and Event Management in Sport SS 4103 Ethics in Sport Management	30

SS 4203 Funding of Sport SS 4396 Sports Studies Internship SS 4803 Seminar in Sports Studies		SS 4203 Funding of Sport SS 4396 Sports Studies Internship SS 4803 Seminar in Sports Studies	
Concentration Electives SS 3303 Communication Management in Sport SS 3503 Sport and Recreational Leadership SS 3603 Program Planning in Sport and Recreation SS 3703 Contemporary Issues in Intercollegiate Athletics SS 3903 Ancient and Medieval Sport History SS 4000 Directed Individual Study in Sport Studies SS 4003 Philosophy of Sport & Physical Activity SS 4403 Gender and Sport SS 4503 Sport Promotion and Sales Management PE 3163 Sport Psychology PE 3313 Sport Physiology PE 4283 Sport Biomechanics KI 2213 Emergency Health Care SO 4333 Sociology of Sport	15	Concentration Electives SS 3303 Communication Management in Sport SS 3503 Sport and Recreational Leadership SS 3603 Program Planning in Sport and Recreation SS 3703 Contemporary Issues in Intercollegiate Athletics SS 3903 Ancient and Medieval Sport History SS 4000 Directed Individual Study in Sport Studies SS 4003 Philosophy of Sport & Physical Activity SS 4403 Gender and Sport SS 4503 Sport Promotion and Sales Management PE 3163 Sport Psychology PE 3313 Sport Physiology PE 4283 Sport Biomechanics KI 2213 Emergency Health Care SO 4333 Sociology of Sport	15
Cognate Courses Choose one of the following cognates to complete the concentration requirements: --Business (25 hrs) ACC 2013 Principles of Financial Accounting ACC 2023 Principles of Managerial Accounting MA 2113 Introduction to Statistics EC 2123 Principles of Microeconomics MKT 3013 Principles of Marketing FIN 3113 Financial Systems FIN 3123 Financial Management MGT 3113 Principles of Management 7 hours of Free Electives --Communication (24 hrs) CO 1223 Introduction to Communication Theory CO 1403 Introduction to the Mass Media CO 2333 Television Production CO 2413 Introduction to News Writing and Reporting CO 3313 News Writing for the Electronic Media CO 3423 Feature Writing CO 3713 Digital Communication CO 3803 Principles of Public Relations 8 hours of Free Electives	24-26	Cognate Courses Choose one of the following cognates to complete the concentration requirements: --Business (25 hrs) ACC 2013 Principles of Financial Accounting ACC 2023 Principles of Managerial Accounting MA 2113 Introduction to Statistics EC 2123 Principles of Microeconomics MKT 3013 Principles of Marketing FIN 3113 Financial Systems FIN 3123 Financial Management MGT 3113 Principles of Management 7 hours of Free Electives --Communication (24 hrs) CO 1223 Introduction to Communication Theory CO 1403 Introduction to the Mass Media CO 2333 Television Production CO 2413 Introduction to News Writing and Reporting CO 3313 News Writing for the Electronic Media CO 3423 Feature Writing CO 3713 Digital Communication CO 3803 Principles of Public Relations 8 hours of Free Electives	24-26

--Foreign Language (26 hours) FLS 1113 Spanish I or FLF 1113 French I or FLG 1113 German I FLS 1123 Spanish II or FLF 1123 French II or FLG 1123 German II FLS 2133 Spanish III or FLF 2133 French III or FLG 2133 German III FLS 2143 Spanish IV or FLF 2143 French IV or FLG 2143 German IV FLS 3113 & FLS 3111 Advanced Spanish Composition and Advanced Spanish Laboratory or FLF 3114 Advanced French Composition or FLG 3114 Advanced German Composition FLS 3233 & FLS 3121 Advanced Spanish Conversation and Advanced Spanish Conversation Practicum or FLF 3124 Advanced French Conversation or FLG 3124 Advanced German Conversation FLS 3143 Hispanic Civilization or FLF 3143 French Civilization or FLG 3143 German Civilization FLS 3313 Economics of the Spanish-Speaking World or FLF 3313 Business French I or FLG 3313 Business German I 6 hours of Free Electives		--Foreign Language (26 hours) FLS 1113 Spanish I or FLF 1113 French I or FLG 1113 German I FLS 1123 Spanish II or FLF 1123 French II or FLG 1123 German II FLS 2133 Spanish III or FLF 2133 French III or FLG 2133 German III FLS 2143 Spanish IV or FLF 2143 French IV or FLG 2143 German IV FLS 3113 & FLS 3111 Advanced Spanish Composition and Advanced Spanish Laboratory or FLF 3114 Advanced French Composition or FLG 3114 Advanced German Composition FLS 3233 & FLS 3121 Advanced Spanish Conversation and Advanced Spanish Conversation Practicum or FLF 3124 Advanced French Conversation or FLG 3124 Advanced German Conversation FLS 3143 Hispanic Civilization or FLF 3143 French Civilization or FLG 3143 German Civilization FLS 3313 Economics of the Spanish-Speaking World or FLF 3313 Business French I or FLG 3313 Business German I 6 hours of Free Electives	
Total Hours	124	Total Hours	124
CURRENT PHYSICAL ACTIVITY AND COACHING CONCENTRATION (PACO) CURRICULUM OUTLINE	Required Hours	**CURRENT PHYSICAL ACTIVITY AND COACHING CONCENTRATION (PACO) CURRICULUM OUTLINE**	Required Hours
English (General Education): EN 1103 English Composition I or EN 1104 Expanded English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	6	English (General Education): EN 1103 English Composition I or EN 1104 Expanded English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	6
Fine Arts (General Education): PE 1323 History and Appreciation of Dance (or other approved Fine Art Elective)	3	Fine Arts (General Education): PE 1323 History and Appreciation of Dance (or other approved Fine Art Elective)	3
Natural Sciences (General Education) BIO 1023 Plants and Humans (or any core approved lab science) BIO 1004 Anatomy and Physiology CH 1043 Survey of Chemistry I	10	Natural Sciences (General Education) BIO 1023 Plants and Humans (or any core approved lab science) BIO 1004 Anatomy and Physiology CH 1043 Survey of Chemistry I	10

Math (General Education): MA 1313 College Algebra (or higher) ST 2113 Introduction to Statistics	6	Math (General Education): MA 1313 College Algebra (or higher) ST 2113 Introduction to Statistics	6
Humanities (General Education): EN 2203 Introduction to Literature (or other approved humanities course) or EN 2243 American Literature Before 1865 or EN 2253 American Literature After 1865 HI 1063 Early U.S. History (or other approved Humanities course) or HI 1073 Modern U.S. History	6	Humanities (General Education): EN 2203 Introduction to Literature (or other approved humanities course) or EN 2243 American Literature Before 1865 or EN 2253 American Literature After 1865 HI 1063 Early U.S. History (or other approved Humanities course) or HI 1073 Modern U.S. History	6
Social/Behavioral Sciences (Gen Ed): PSY 1013 General Psychology (or other approved Gen Ed course) SO 1003 Introduction to Sociology (or other approved Gen Ed course)	6	Social/Behavioral Sciences (Gen Ed): PSY 1013 General Psychology (or other approved Gen Ed course) SO 1003 Introduction to Sociology (or other approved Gen Ed course)	6
Kinesiology Core Courses PE 1000 Play, Fitness & Physical Activity (or any 3, 1-hour PE activity courses; PE 1191 is not an option) SS 4003 Philosophy of Sport & Physical Activity or SS 4303 Globalization and Sport or PE 3163 Sport Psychology or EP 3183 Exercise Psychology EP 2013 Fundamentals of Kinesiology EP 3233 Anatomical Kinesiology	12	Kinesiology Core Courses PE 1000 Play, Fitness & Physical Activity (or any 3, 1-hour PE activity courses; PE 1191 is not an option) SS 4003 Philosophy of Sport & Physical Activity or SS 4303 Globalization and Sport or PE 3163 Sport Psychology or EP 3183 Exercise Psychology EP 2013 Fundamentals of Kinesiology EP 3233 Anatomical Kinesiology	12
Concentration Courses Choose any 10 courses PE 1243 Methods of Teaching Games and Sports PE 1253 Methods of Teaching Lifetime Activities PE 1263 Methods of Teaching Rhythms PE 3033 Basketball and Football Officials PE 3133 Adapted Physical Education PE 3163 Sport Psychology PE 3223 Motor Development and Movement PE 3533 Coaching Sports PE 4533 Developing Coaching Expertise SS 2003 Foundations of Sport Industry SS 3603 Program Planning in Sport and Recreation SS 3403 Facility and Event Management in Sport SS 3503 Sport and Recreational Leadership KI 2023 Foundations of Health Education	30	Concentration Courses Choose any 10 courses PE 1243 Methods of Teaching Games and Sports PE 1253 Methods of Teaching Lifetime Activities PE 1263 Methods of Teaching Rhythms PE 3033 Basketball and Football Officials PE 3133 Adapted Physical Education PE 3163 Sport Psychology PE 3223 Motor Development and Movement PE 3533 Coaching Sports PE 4533 Developing Coaching Expertise SS 2003 Foundations of Sport Industry SS 3603 Program Planning in Sport and Recreation SS 3403 Facility and Event Management in Sport SS 3503 Sport and Recreational Leadership KI 2023 Foundations of Health Education	30
Additional Requirements KI 2213 Emergency Health Care PSS 2113 Introduction to Turfgrass Science PSS 4443 Athletic Field Management	37	Additional Requirements KI 2213 Emergency Health Care PSS 2113 Introduction to Turfgrass Science PSS 4443 Athletic Field Management	37

PE 4283 Sport Biomechanics EDX 3213 Individualizing Instruction for Exceptional Children SS 4003 Philosophy of Sport & Physical Activity or SS 4303 Globalization and Sport SS 4396 Sports Studies Internship EP 3304 Exercise Physiology EP 4183 Exercise and Weight Control EP 4113 Fitness Programs and Testing Procedures EP 4153 Training Techniques for Exercise and Sport		PE 4283 Sport Biomechanics EDX 3213 Individualizing Instruction for Exceptional Children SS 4003 Philosophy of Sport & Physical Activity or SS 4303 Globalization and Sport SS 4396 Sports Studies Internship EP 3304 Exercise Physiology EP 4183 Exercise and Weight Control EP 4113 Fitness Programs and Testing Procedures EP 4153 Training Techniques for Exercise and Sport	
Free Electives	8	Free Electives	8
Total Hours	124	Total Hours	124

Current Title and Description

Title: Strength and Conditioning

Description: The Strength and Conditioning concentration provides students with the necessary knowledge to incorporate exercise physiology concepts into activities that enhance fitness and performance. This concentration covers everything from the development of plans to enhance fitness in apparently healthy populations to improving performance in elite athletes. Strength and Conditioning takes into consideration a combination of the physiological, biomechanical, and psychological aspects of training in the development of individual and team needs for customized programming. The concentration serves as the foundation for students to become sport scientists, strength and conditioning coaches, personal trainers, and specialists within corporate fitness/wellness programs.

Students in and desiring admission into the Department of Kinesiology's Strength and Conditioning concentration will be required to have and maintain a minimum MSU GPA of 2.50. In addition, an overall MSU GPA of 2.50 is required for graduation from the Strength and Conditioning concentration.

Proposed Title and Description

Title: Strength and Conditioning

Description: The **mission of the** Strength and Conditioning concentration provides students with the necessary knowledge to incorporate exercise physiology concepts into activities that enhance fitness and performance. This concentration covers everything from the development of plans to enhance fitness in apparently healthy populations to improving performance in elite athletes. Strength and Conditioning takes into consideration a combination of the physiological, biomechanical, and psychological aspects of training in the development of individual and team needs for customized programming. The concentration serves as the foundation for students to become sport scientists, strength and conditioning coaches, personal trainers, and specialists within corporate fitness/wellness programs. **The goals of this concentration are to prepare students to take the Certified Strength and Conditioning Specialist (CSCS) exam through the National Strength and Conditioning Association and to prepare them for careers in the strength and conditioning industry. To monitor this, the Department of Kinesiology publishes the following outcomes: pass rates for the CSCS exam and placement, graduation, and retention rates for students who graduated from the Strength and Conditioning concentration.**

Students in and desiring admission into the Department of Kinesiology's Strength and Conditioning concentration will be required to have and maintain a minimum MSU GPA of 2.50. In addition, an overall MSU GPA of 2.50 is required for graduation from the Strength and Conditioning concentration.

Justification and Student Learning Outcomes

Adding the required elective of **EP 4813 – Strength and Conditioning Practicum** to the Strength and Conditioning concentration will allow this program the capability of receiving accreditation from the Council of Accreditation of Strength and Conditioning Education (CASCE). The National Strength and Conditioning Association (NSCA) recently announced that by 2030 (target date) the eligibility for the Certified Strength and Conditioning Specialist (CSCS) examination will require candidates to graduate with a Bachelor's degree in a strength and conditioning related field, from a program accredited by an NSCA-approved accrediting agency (CASCE). The CSCS credential was accredited by the National Commission for Certifying Agencies in 1993 and is the longest standing and most widely accepted accredited strength and conditioning certification in the industry. As of 2016, all three NCAA divisions have legislation that requires strength and conditioning professionals to have certification from a

nationally accredited agency (i.e., NSCA). Furthermore, many professional organizations have adopted this legislation. For example, Major League Baseball requires all strength and conditioning coaches to hold the CSCS credential. This trend is also growing in the youth and private sector of strength and conditioning and sports performance, such that individuals without certification will no longer be able to compete for these jobs. Per the CASCE Accreditation Standards, Standard III.D. states "The field experience must provide a minimum of 300 hours of contact time." Our current undergraduate curriculum does not meet this standard, as the current internship course, EP 4814, only requires 200 contact hours. The addition of **EP 4813** as a concentration will now require 350 contact hours of field experience for all students in this concentration. Therefore, to ensure our students may qualify for the CSCS examination and compete for jobs in the strength and conditioning industry by graduating from an accredited program, I am proposing the addition of **EP 4813 – Strength and Conditioning Practicum** as concentration class and reducing elective hours from 15 required credit hours to 12 required credit hours to maintain 124 credit hours for the curriculum. Furthermore, per the requirements of CASCE, the addition of specific outcomes, namely publishing the placement, graduation, and retention rates and CSCS pass rates, is required to be compliant with their standards.

1. **Will this Program change meet local, state, regional, and national educational and cultural needs?**
   Yes. Per the recent changes to the CSCS examination requirements by the NSCA, any student wishing to take the exam must have a Bachelor's degree in a strength and conditioning related field accredited by CASCE. One of the requirements is that the program must have 300 contact hours of field experience and publish specific outcomes. This change will allow the program to meet the requirement so students who graduate from our program will qualify for the CSCS examination, the longest standing and most widely accepted accredited strength and conditioning certification in the industry. We will also meet compliance requirements on the outcome data we need to report (placement rates and CSCS pass rates).

2. **Will this program change result in a duplication in the system?**
   No.

3. **Will this program change/advance student diversity within the discipline?**
   Yes. This program name change will allow MSU to attract individuals who desire to pursue a career in strength and conditioning or a related field, allowing the program to reach a broader base of individuals.

4. **Will this program change result in potential placement of graduates in MS, the Southeast, and the U.S.?**
   Yes. This addition of EP 4813 to the curriculum will result in an increase in the potential placement of graduates in MS, the Southeast, and across the country. The proposed change will allow our program to meet CASCE accreditation standards, a necessary process for us to attract individuals to the state, region, and country who desire to pursue a career in strength and conditioning.

5. **Will this program change result in an increase in the potential salaries of graduates in MS, the Southeast, and the U.S.?**
   Yes. Due to the new requirements for individuals seeking the CSCS examination, and subsequently strength and conditioning jobs, graduates from this program will be eligible to take the examination, providing a competitive advantage when seeking these jobs.

Learning outcomes: Students will have a greater quantity of field experience with the addition of EP 4813 as a concentration class.

Proposed 4-letter Abbreviation: KINE-STCN

Effective Date: Summer 2024

kineweb@colled.msstate.edu
T - 662.325.2963
F - 662.325.4525

MISSISSIPPI STATE

180 Magruder St.
P.O. Box 6186
Mississippi State, MS 39762

DEPARTMENT OF KINESIOLOGY
www.kinesiology.msstate.edu

January 29th, 2024

TO: Dr. JohnEric Smith

FROM: Dr. Zack Gillen (Department of Kinesiology and submitter of the proposal)

RE: Support of: addition of EP 4813: Strength and Conditioning Practicum as concentration class for the Strength and Conditioning Concentration and reduction in elective hours to 12 credit hours and publishing placement rates and CSCS pass rates

This letter of support is offered by the Undergraduate Curriculum Committee for the Exercise Science Division of the Department of Kinesiology, which is the curriculum committee for our Exercise Science Division undergraduate programs, for the proposed addition of EP 4813: Strength and Conditioning Practicum as required concentration course and the reduction of elective hours to 12 credit hours for the Strength and Conditioning concentration in the Department of Kinesiology and adding placement rates and CSCS pass rates as outcomes. As indicated by the signatures below, a majority of the Undergraduate Curriculum Committee for the Exercise Science Division in the Department of Kinesiology have approved the proposal as written for submission to the Box Council and the UCCC.

Undergraduate Curriculum Committee of the Department of Kinesiology

	01/29/24	Adam C. Knight, PhD — Digitally signed by Adam C. Knight, PhD Date: 2024.01.30 13:42:07 -06'00'	01/29/24
Dr. Stamatis Agiovlasitis	Date	Dr. Adam Knight	Date
Harish Chander — Digitally signed by Harish Chander Date: 2024.01.30 20:54:55 -06'00'	01/29/24	John Lamberth — Digitally signed by John Lamberth Date: 2024.01.30 11:49:34 -06'00'	01/29/24
Dr. Harish Chander	Date	Dr. John Lamberth	Date
	01/29/24		01/29/24
Dr. Chia Chia Chen	Date	Dr. Zhujun Pan	Date
Zachary M Gillen — Digitally signed by Zachary M Gillen Date: 2024.01.29 17:33:19 -06'00'	01/29/24		01/29/24
Dr. Zachary Gillen	Date	Ms. Erin Grant-Butler	Date

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Benjamin Wax — Digitally signed by Benjamin Wax Date: 2024.01.31 10:38:27 -06'00' — 01/29/24
Dr. Benjamin Wax — Date

Megan Holmes — Digitally signed by Megan Holmes DN: cn=Megan Holmes, o=Mississippi State University, ou=Department of Kinesiology, email=mholmes@colled.msstate.edu, c=US Date: 2024.01.31 09:57:09 -06'00' — 01/29/24
Dr. Megan Holmes — Date

01/29/24
Dr. Holly Wiley — Date

LeeAnn Joe — Digitally signed by LeeAnn Joe Date: 2024.01.31 10:18:58 -06'00' — 01/29/24
Ms. LeeAnn Joe — Date

go dawgs

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: Education **Department:** Teacher Education and Leadership

Contact Person: Alisha Milam **Mail Stop:** 9300 **E-mail:** am5064@msstate.edu

Nature of Change: New Graduate Certificate **Date Initiated:** 12/15/2023
Effective Date: Summer 2024
Current Degree Program Name: N/A

Major: N/A **Concentration:** N/A

New Certificate Name: Teach Mississippi

Major: N/A **Concentration:** N/A

Summary of Proposed Changes:

The Department of Teacher Education & Leadership and the Division of Education proposes a new 12-hour graduate certificate in Teach Mississippi that will be offered on Campus 2 and 5 only (at this time). Approval is sought for Campuses 1, 2, and 5 for the possibility of future implementation. The certificate includes 4 graduate-level courses that currently exist (EDS 8243, 6403, 8883, EDX 8173). These courses are currently approved for Campuses 1, 2, and 5.

Approved: **Date:**

Janice Nicholson
Janice Nicholson (Jan 22, 2024 08:39 EST)
Department Head

Kimberly R. Hall Digitally signed by Kimberly R. Hall Date: 2024.01.18 14:36:04 -06'00'

Director of Academic Quality — 1/4/2023

Chair, College or School Curriculum Committee — 1/24/2023

Kimberly R. Hall Digitally signed by Kimberly R. Hall Date: 2024.01.25 12:59:14 -06'00'
Dean of College or School

Chair, University Committee on Courses and Curricula — 2/29/24

Rebecca Robichaux-Davis — 3/6/2024
Chair, Graduate Council(if applicable)

Chair, Deans Council — April 12th, 2024

NEW GRADUATE CERTIFICATE OUTLINE FORM

Use the chart below to indicate your new degree outline. Please list required College and Major Required Courses and if appropriate Concentration Courses. Graduate programs that wish to specialize beyond the Major must have at least two concentrations. Add additional rows as needed for programs with more than two concentrations. Expand rows as needed.

PROPOSED New Certificate	
Certificate: Teach Mississippi Level: Graduate	
The Teach Mississippi Certificate is designed as an alternate route licensure program at the graduate-level for those who wish to prepare for a career as a secondary teacher (grades 7-12) in art education, biology, chemistry, English language arts, mathematics, physical education, physics, and social studies. Students will complete initial licensure coursework focused on planning and managing learning, assessment, and serving students with special needs. The course work continues with application of these skills in an internship in a secondary classroom culminating with a regular, renewable Mississippi teacher's license for grades 7-12 in their chosen subject area.	
Proposed Curriculum Outline	Required Hours
Certificate Required Courses:	
EDS 8243 Advanced Planning and Managing of Learning	3
EDS 6403 Evaluation in Secondary Schools	3
EDX 8173 Special Education in the Regular Classroom	3
EDS 8883 Secondary Internship I	3
Total Hours	**12**

Student Learning Outcomes

These student learning outcomes are designed to ensure that those who obtain the Teach Mississippi Certificate possess the knowledge, skills, and competencies necessary for effective and culturally competent practice in the field of secondary education. After completion of the Teacher Mississippi Certificate, the student will be able to:

1. **Establish a Community of Learners:**
   - Classroom norms and expectations are collaboratively established, maintained, and revised when needed.
   - Teacher/student and student/student relationships are built and nurtured.
   - Expectations for participation are clear, high, and reasonable.
   - Classroom discussion is common with norms that support students listening to, building on and responding to each other's ideas.
2. **Teach Towards Instructional Goals:**
   - Learning goals are set that are developmentally appropriate and fit along a trajectory that is standards-based.
   - Thoroughly planned lessons are intentionally created that set students up to meet the learning goal(s), reflect instruction, and are fully aligned to standards and assessments.

- Modifications are indicated in planning and made during instruction to support students in meeting the learning goals.

3. **Position Students as Competent Sense Makers:**
   - Instruction includes academically rigorous tasks and content.
   - Access to strategies, tools and resources are provided to students to support meeting learning goals.
   - Tools to express ideas/arguments and ask questions are provided so that students have ownership of ideas.
   - Student thinking is the center of academic work where teachers and students validate each other's thinking.
4. **Teach with Each Student in Mind:**
   - Students' ideas, lived experiences, cultures, languages, and diverse understandings are integrated into all classroom experiences.
   - Planning includes differentiation for all students and student responses and misconceptions are anticipated and planned for.
   - A flexible and responsive learning environment is established, attending to students' needs in the moment.
5. **Orient Students to the Content:**
   - Support is provided for students to articulate their understandings of what they are learning and why.
   - Student thinking is represented to facilitate connections to/with the content.
   - Big ideas - what's important to learn and why – are highlighted.
   - Students are supported to make sense of and use academic language to discuss content.
6. **Assess Student Understanding to Guide Instruction:**
   - Formative and summative assessment data are analyzed and used to plan for data-driven instruction.
   - A variety of formal and informal assessments are utilized to monitor student progress.
   - Instructional goal criteria are communicated, and students know how and by what criteria (e.g., rubrics) they will be assessed.
   - Students are positioned as active participants in a continuous feedback loop using both formative and summative assessment.
   - Students use assessment criteria to engage in self- and peer assessment.
7. **Invest in the School Community to Support Student Learning:**
   - Authentic partnerships are built with families and communities through ongoing communication to support student learning both in and out of the classroom.
   - Participation in professional learning opportunities is sought after and ongoing.
   - Active engagement and participatory roles are taken on (by teachers) in different levels of community (classroom, professional, broader community).
8. **Reflect on Teaching Practice Independently and in Collaboration with Colleagues:**
   - Reflection on teaching practice is continuous (lessons taught, conversations with students, transitions, etc.) through video and/or written reflection to identify strengths, successful strategies, and areas for growth.
   - Feedback from peers, mentors and others is invited to improve teaching practice and team collaboration.

- Self-assessment is part of the assessment/instruction cycle.
- New methods and strategies are sought to improve teaching practice based on feedback and self-assessment.
- Improvement in teaching practice is observable based on feedback provided.

Support:
Please see letters of support from program faculty from Campus 1, 2, and 5 in the Department of Teacher Education and Leadership and the administration from Campus 1 and 2.

This certificate program will currently be offered on Campus 2 and 5 only.

Proposed 4-letter Abbreviation: TMSC

Effective Date: Summer 2024

TO: Box Council and UCCC Committee Members

FROM: Starkville and Meridian Secondary Education Faculty

RE: Teach Mississippi Institute (TMI) Graduate-Level Certificate in Secondary Education

DATE: January 4, 2024

Dear Box Council and UCCC Committee Members:

This letter of support is offered by the Starkville and Meridian Secondary Education Faculty members for the proposed addition of a graduate-level Teach Mississippi Institute (TMI) Certificate in Secondary Education. The certificate will currently be offered on the Meridian campus. The TMI is a Mississippi Department of Education approved alternate route pathway to secondary education licensure. Once students complete the certificate, they will be encouraged to complete the entire Master of Arts degree program in Secondary Education. As indicated by the signatures below, a majority of the program faculty approve the proposal for the addition of the certificate.

Program Faculty:

Paul Binford

Liza Bondurant

Elaine Bunn

Elaine Bunn

Missy Hopper

Alisha Milam

Alisha Milam

Lindon Ratliff

Lindon Ratliff

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 Bagley College of E **Department:** Computer Science & E

Contact Person: Shahram Rahim **Mail Stop:** 963 **E-mail:** rahimi@cse.m

Nature of Change: Addition **Date Initiated:** 11/2/2023

Current Degree Program Name:

Current Major:

Current Concentration(s):

Current Campus(es): Starkville

New Degree Program Name: BAS **Effective Date:**

Semester	Year
Fall	2024

Proposed Major: Cybersecurity

Proposed Concentration(s):

Proposed Campus(es): Starkville

Summary of Proposed Changes:

Add a new major to the BAS degree in Cybersecurity

Approved:	Date:
Department Head	11/06/2023
Director of Academic Quality	2/2/2024
Dr. T.J. Jankun-Kelly Chair, College or School Curriculum Committee	Digitally signed by Dr. T.J. Jankun-Kelly Date: 2024.02.05 17:04:57 -06'00'
Kari Babski-Reeves for Jason Ketih Dean of College or School	Digitally signed by Kari Babski-Reeves for Jason Ketih Date: 2024.02.06 07:35:22 -06'00'
Chair, University Committee on Courses and Curricula	3/28/24
Chair, Graduate Council (if applicable)	
Chair, Deans Council	April 12th, 2024

NEW DEGREE OUTLINE FORM

Use the chart below to indicate your new 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. Expand rows as needed.

PROPOSED New Degree	
Degree: Bachelor of Applied Science **Major:** Cybersecurity **Concentration:**	
The Bachelor of Applied Science in Cybersecurity is a comprehensive degree program designed to equip students with the knowledge, skills, and expertise required to become proficient cybersecurity analysts. This program delves deep into the world of cybersecurity, offering a blend of theoretical knowledge and hands-on experience to address the ever-evolving challenges in the digital realm. Designed with the working adult in mind, this program offers a flexible and comprehensive curriculum that combines theoretical knowledge with practical skills that will be offered in an online modality. This program ensures that graduates are not only well-versed in the theoretical aspects of cybersecurity but also possess the practical skills required to defend organizations against cyber threats. With a strong emphasis on real-world applications, hands-on training, and ethical considerations, this program is the ideal choice for those looking to make a significant impact in the field of cybersecurity. Students must possess an accredited Associate of Applied Science (AAS) in Cybersecurity, Cyber Defense, Information Systems Security, Network Security, or other computer-science related fields.	
Proposed Curriculum Outline	**Required Hours**
English (General Education): EN 1103 English Composition I or EN 1104 Expanded English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	**6**
Creative Discovery (General Education): Any course satisfying Creative Discovery	**3**
Natural Sciences: (2 labs required from Gen Ed): Any 2 courses satisfying Natural Sciences	**6**
Quantitative Reasoning (General Education): MA 2113 Introduction to Statistics (or higher)	**3**
Humanities (General Education): Any 2 courses that satisfy the Humanities requirement	**6**
Social/Behavioral Sciences (General Education): Any 2 courses satisfying Social/Behavioral Sciences	**6**
Subtotal	**30**

PROPOSED New Degree	
Degree: Bachelor of Applied Science **Major:** Cybersecurity **Concentration:**	
Major Core Courses: CSE 1011 Introduction to Computer Science and Engineering CSE 1284 Introduction to Computer Programming CSE 1384 Intermediate Computer Programming CSE 2213 Methods & Tools in Software Development CSE 3713 Introduction to Cybersecurity CSE 3763 Ethical & Legal Issues CSE 4243 Information & Computer Security CIS 3713 IT Forensics CIS 4783 Cloud Computing and Security CIS 4623 Cyber Risk Analysis CIS 3613 Cybersecurity Assessment, Authorization, Operations CIS 2713 System Administration CIS 3263 Web Application Security CIS 4813 BAS Major Capstone Project I CIS 4823 BAS Major Capstone Project II	 1 4 4 3 3 3 3 3 3 3 3 3 3 3 3 3
Other Required Courses: BIS 3753 Business Database Systems (or TECH 2123 Database Management or CSE 4503 Database Management Systems) CO 1003 Fundamentals of Public Speaking (or CO 1013) GE 3513 Technical Writing TECH 4563 Introduction to Data Networks (or CSE 4153)	 3 3 3 3
Cybersecurity Electives: (Select 5 from the list below.) BIS 3233 Introduction to Management Information Systems BIS 4113 Business Information Systems Security Management CSE 3723 Computer Organization CSE 4253 Secure Software Engineering CSE 4363 Software Reverse Engineering CSE 4773 Introduction to Cyber Operations CSE 4383 Network Security	**15**
Technical Electives:	**0**
University Electives: Any upper-level CSE, CIS, ECE, MA course	**18**
Subtotal	**90**
Total Hours	**120**

STUDENT LEARNING OUTCOMES AND ASSESSMENT

1. Students will be able to demonstrate critical thinking and problem-solving skills in the domain of cybersecurity

2. Students will be able to demonstrate fundamental knowledge in cybersecurity systems, operating systems and networking.

3. Students will be able to use cyber security tools and technologies to address emerging trends and threats.

4. Students will be able to explain cybersecurity law and ethics, security policies and procedures, and risk management practices.

5. Students will be able to perform vulnerability assessment and demonstrate appropriate incident response.

6. Students will interface with computing professionals such as Computer Scientists and Software Engineers.

SUPPORT
Letters of support from the CSE Curriculum Committee and supporting departments (BIS and TECH) are included.

PROPOSED 4-LETTER ABBREVIATION
BASC

NEW ACADEMIC DEGREE PROGRAM PROPOSAL

Institutional Request Form – Appendix 8
(Submit in PDF format with signatures.)

Institution:	Mississippi State University
Date of anticipated implementation:	August 2024
Program title as it will appear on Academic Program Inventory, Diploma, and Transcript:	Cybersecurity
Name of degree(s) to be awarded:	Bachelor of Applied Science
Six-digit CIP code:	15.1202
Total credit-hour requirement to earn the degree:	120
Responsible academic unit:	Computer Science and Engineering
Institutional contact:	Shahram Rahimi
Phone:	
Email:	
SACSCOC Substantive Change:	☒ Program proposed **IS NOT** a substantive change. ☐ Program proposed **IS** a substantive change.
Incremental, five-year cost of implementation:	$1.4MM
Incremental, five-year per student cost of implementation:	$14,000
Potential five-year, new revenue:	$2MM
Potential new, five-year revenue per student:	$20,000
Will it attract new students to the university?	☒ Yes ☐ No
List any institutions within the State offering similar programs:	None

Number of students expected to enroll in first 5 years:		Number of students expected to graduate in first 5 years:	
Year 1	15	Year 1	0
Year 2	20	Year 2	10
Year 3	20	Year 3	20
Year 4	25	Year 4	30
Year 5	25	Year 5	30
Total	105	Total	90

Program summary (include second majors completed, if applicable):
The Bachelor of Applied Science in Cybersecurity is a comprehensive degree program designed to equip students with the knowledge, skills, and expertise required to become proficient cybersecurity analysts. This program delves deep into the world of cybersecurity, offering a blend of theoretical knowledge and hands-on experience to address the ever-evolving challenges in the digital realm. Designed with the working adult in mind, this program offers a flexible and comprehensive curriculum that combines theoretical knowledge with practical skills that will be offered in an online modality. This program ensures that graduates are not only well-versed in the theoretical aspects of cybersecurity but also possess the practical skills required to defend organizations against cyber threats. With a strong emphasis on real-world applications, hands-on training, and legal and ethical considerations, this program is the ideal choice for those looking to make a significant impact in the field of cybersecurity.

NEW ACADEMIC DEGREE PROGRAM PROPOSAL

Institutional Request Form – Appendix 8

(Submit in PDF format with signatures.)

The audit of recently approved academic programs ensures that the program outcomes are congruent with the Board-approved proposal.

Please respond to the questions on the following pages to aid the institution and IHL staff in making recommendations to the IHL Board of Trustees.

Chief Academic Officer Signature – Date

Institutional Executive Officer Signature – Date

NEW ACADEMIC DEGREE PROGRAM PROPOSAL

Institutional Request Form – Appendix 8
(Submit in PDF format with signatures.)

New Academic Degree Program Questions:

1 **Describe how the degree program will be administered including the name and title of person(s) who will be responsible for curriculum development and ongoing program review.**

The BAS in Cybersecurity will be offered through the department of Computer Science and Engineering (CSE). The department has a Cybersecurity committee, which is a subset of CSE faculty with expertise in cybersecurity, that will be primarily responsible for the development, review, and evaluation of the degree. George Trawick, Associate Clinical Professor and Cyber Program Coordinator, will be the lead faculty member.

2 **Describe the educational objectives of the degree program including the specific objectives of any concentrations, emphases, options, specializations, tracks, etc.**

The educational objectives of the BAS in Cybersecurity are to:
1. Develop students' critical thinking and problem-solving skills in the domain of cybersecurity.
2. Provide students with the fundamental knowledge in cybersecurity systems, operating systems and networking.
3. Provide students with experience in using cyber security tools and technologies to address emerging trends and threats.
4. Provide students with knowledge of cybersecurity law and ethics, security policies and procedures, and risk management practices.
5. Provide students with hands on training for vulnerability assessment and incident response.
6. Prepare students to interface with computing professionals such as Computer Scientists and Software Engineers.

3 **Describe any special admission requirements for the degree program including any articulation agreements that have been negotiated or planned.**

Applicants to the Bachelor of Applied Science in Cybersecurity must possess an accredited Associate of Applied Science in Cybersecurity, Cyber Defense, Information Systems Security, Network Security, or other computer-science related fields as approved by the department. Students must also have a GPA of 2.0 as computed by Mississippi State University and must also be in good academic standing with their current college.

4 **Describe the professional accreditation that will be sought for this degree program. If a SACSCOC visit for substantive change will be necessary, please note.**

None at this time

5 **Describe the curriculum for this degree program including the recommended course of study (appending course descriptions for all courses) and any special requirements such as clinical, field experience, community service, internships, practicum, a thesis, etc.**

This BAS degree is 120 credit hours, 30 of which are general education requirements, 45 hours of major core required courses (descriptions attached), 12 hours of other required courses (descriptions attached), 15 hours of cybersecurity electives (descriptions attached), 9 hours of technical electives and 9 hours of university electives. As the intent is for students with Associate of Arts degrees from junior and community colleges to be able to use 60 hours of their degree towards the fulfillment of degree requirements, required and elective courses were selected to maximize this transfer credit hours.

6 **Describe the faculty who will deliver this degree program including the members' names, ranks, disciplines, current workloads, and specific courses they will teach within the program. If it will be necessary to add faculty in order to begin the program, give the**

desired qualifications of the persons to be added.

All general education requirements will be taught by existing faculty within their respective departments at MSU. The required courses and cybersecurity electives will be taught primarily from existing faculty within the Department of Computer Science and Engineering or hired lecturers on an as needed basis. Two new faculty, with terminal degrees in cybersecurity or a related field or faculty with commiserate work experience, will be hired with the CSE department specifically to teach new classes for this degree (CIS designation). The remaining electives will be taught by existing faculty by the unit responsible for that course.

1. George Trawick, Associate Clinical Professor, 3 courses per semester, CSE 4383 Network Security, CSE 4243 Information & Computer Security
2. Max Young, Associate Professor, 3 courses per year, CSE 4153 Data Comm Networks
3. Sudip Mital, Assistant Professor, 3 courses per year, CSE 4773 Introduction to Cyber Operations
4. Charan Gudla, Assistant Clinical Professor, 3 courses per year, CSE 4503 Database Management Systems
5. Stephen Torri, Associate Professor, CSE 4363 Software Reverse Engineering, CSE 4253 Secure Software Engineering
6. Lisa Redwine, Instructor, CSE 1284 Introduction to Computer Programming
7. David Neal, Instructor, CSE 3723 Computer Organization
8. Kortni Neal, Instructor, CSE 1384 Intermediate Computer Programming, CSE 2213 Methods & Tools in Software Development
9. David Lee, Instructor, CSE 3713 Introduction to Cybersecurity, CSE 3763 Ethical & Legal Issues
10. Josh Crowson, Instructor, CSE 1284 Introduction to Computer Programming
11. Aubrey Knight, Instructor, CSE 1384 Intermediate Computer Programming
12. Litany Lineberry, CSE 1011 Introduction to Computer Science and Engineering

7 **Describe the library holdings relevant to the proposed program, noting strengths and weaknesses. If there are guidelines for the discipline, do current holdings meet or exceed standards?**

The Mississippi State Library has adequate holdings for the proposed program. The following databases and more from the Mississippi State Library are relevant to the BAS in Cybersecurity program:

- Academic Search Premier
- CloudSource+ and CloudSourceOA that search multiple databases, journal publishers, index open access scholarly journal articles, open textbooks, and open education resources
- eBooks from EBSCO
- ERIC
- Over 2.9 million volumes (MSU Library's online catalog); Over 11,000 print volumes in the local collections at MSU libraries
- 200,000 electronic journals in an extraordinary range of computer science-related subjects and full-text content
- Access to electronic journals sufficient to meet the needs of baccalaureate cybersecurity studies.
- Discipline-based research guides covering resources in computer science, information technology, scholarly communication and more
- Access to virtual training opportunities through the library's MaxxSouth Digital Media

Center (DMC)
(ex.: Excel, Adobe InDesign and other technology) online.
• ILL and document delivery services for obtaining materials not owned by MSU Libraries.

8 **Describe the procedures for evaluation of the program and its effectiveness in the first five years of the program, including admission and retention rates, program outcome assessments, placement of graduates, changes in job market need/demand, ex-student/graduate surveys, or other procedures.**

The BAS in Cybersecurity will be evaluated using the same procedures by which all degree programs are evaluated. MSUs Office of Institutional Research & Effectiveness uses a yearly continuous improvement process where educational outcomes and student learning objectives are measured using direct and indirect assessments that indicate attainments of these objectives and outcomes. Results from these assessments are used to drive modifications and changes in the program. All students will complete the exit survey required of all students at MSU and in the Bagley College of Engineering to track employment and placement of graduates.

9 **What is the specific basis for determining the number of graduates expected in the first five years?**

MSU has extensive experience with cybersecurity programs as it holds 3 CAE (Centers for Academic Excellence) designations from the National Security Agency (NSA), one of only a handful of universities to hold all 3 designations, has been conducting research in the area of cybersecurity for a number of years, and collaborates in the Scholarship for Service program to place students with federal agencies with skills in cybersecurity. Additionally, a market analysis was conducted to determine the viability of an applied bachelor's degree in this field.

10 **Using expected enrollment, provide the total anticipated budget for the program including implementation and 4 subsequent years (total of 5 years) of operation; any anticipated direct, indirect, and incremental costs necessary to start the program; anticipated, incremental annual revenue based on student enrollment; and other sources of funding.**

Please explain what has been included in the costs and revenues.

Start-Up Costs: one-time costs associated with offering this program

Direct, Incremental Costs: additional annual costs to the university as a result of offering this program

Incremental Revenue: additional annual revenue assuming that this program will bring in new students paying full tuition

Non-Tuition Revenue: external funds, grants, contracts or other revenues attributable to the addition of this program

Differential: all revenues minus all costs

Year	Incoming Students	Total Enrollment	Start-Up Costs	A Additional Annual Costs	B Additional Annual Revenue	C Non-Tuition Revenue	(B+C)-A Differential
2023-24	15	15	$200,000.00	$80,000	$400,000.00	$0.00	$320,000.00
2024-25	20	35	$0.00	$280,000.00	$400,000.00	$0.00	$120,000.00
2025-26	20	55	$0.00	$280,000.00	$400,000.00	$0.00	$120,000.00
2026-27	25	80	$0.00	$280,000.00	$400,000.00	$0.00	$120,000.00

2027-28	25	105	$0.00	$280,000.00	$400,000.00	$0.00	$120,000.00
TOTAL	105	0	$200,000.00	$1,200,000.00	$2,000,000.00	$0.00	$800,000.00

For revenue this is from tuition assuming about a 50% discount rate for E&G scholarships.

For expenses these are for two new faculty positions and their fringe benefit.

11 Program Demand: Select one or both of the following to address student demand:

☐ Survey of Student Interest

Number of surveys administered:	Click or tap here to enter text.
Number of completed surveys returned:	Click or tap here to enter text.
Percentage of students interested in program:	Click or tap here to enter text.

Include a brief statement that provides additional information to explain the survey.
Click or tap here to enter text.

☒ Market Analysis or Evidence of Labor Market Need

Most cybersecurity professionals enter this field with a bachelor's degree, according to the US Bureau of Labor Statistics (2021). A recent study from Burning Glass Technologies found that 88 percent of cybersecurity job postings specifically request a bachelor's degree or higher (2019). The US Bureau of Labor Statistics (2021) estimates that Information Security Analysts will be the 10th fastest growing occupation over the next decade. The creation of this BAS major in cybersecurity will not only increase the workforce for Mississippi but it will also expand the educational opportunities of cybersecurity professionals in Mississippi, providing them with opportunities to improve their career placement and income within a high-wage, high-demand field. Once approved, offering this BAS major will strengthen the current cybersecurity partnerships with Keesler Air Force Base and Mississippi Gulf Coast Community College. Moreover, it will be an ideal instructional location for current and future community college partners outside of Mississippi. The creation of this applied cybersecurity major will vertically align with the aforementioned partners' AAS offerings in this field of study.

12 Employment Opportunities for Graduates (state, region, nation):

According to the Bureau of Labor Statistics (BLS), graduates of a Bachelor of Applied Science in Cybersecurity can expect strong employment opportunities in the state, region, and nation from 2021-2031. This degree can prepare graduates for roles such as information security analysts, cyber consultants, penetration testers, and more. The BLS projects a 35% growth rate for Information Security Analysts from 2021 to 2031, much faster than the average for all occupations' projection of 4% growth for that same time period. Moreover, there are an estimated 56,500 jobs expected to open during that time having a median salary of $102,600 and an unemployment rate of 0.8% nationwide. For the purposes of this report, we used the states where the university enrolls the most

students and places the most graduates. Those states are Alabama, Arkansas, Florida, Georgia, Louisiana, Tennessee, and Texas. Table 1 below summarizes the employment projections for the positions of information security analysts in Mississippi, the Southern region, and the nation from 2021-2031.

Table 1: Employment Projections for Information Security Analyst Positions

Job Title	Employment in MS	Employment in the Region	Employment in the US
Information Security Analyst	470	44,300	182,500

MISSISSIPPI STATE UNIVERSITY™
DEPARTMENT OF MANAGEMENT
AND INFORMATION SYSTEMS

Mail Stop 9581
Mississippi State, MS 39762
P. 662-325-3928

To: University Committee on Courses and Curricula

From: Head, Management and Information Systems Department
Starkville Campus

Date: November 28, 2023

This letter is to express the support of the Department of Management & Information Systems (MIS) for the inclusion of the following courses for the BAS – Cyber Security Program:

BIS 3753 Business Database Systems
BIS 3233 Introduction to Management Information Systems
BIS 4113 Business Information Systems Security Management

Thank you,

Laura E. Marler

Dr. Laura E. Marler

Head, Department of Management & Information Systems
Jim and Pat Coggin Endowed Professor of Management
Family Business Education Initiative Director
McCool Hall, 302-I
Mississippi State, MS 39762
662.325.1957 (office)
662.325.3928 (department)

MISSISSIPPI STATE UNIVERSITY

College of Arts & Sciences
Department of Communication

P.O. Box PF
216 President's Circle
Mississippi State, MS 39762

P. 662.325.3320
F. 662.325.3210
www.comm.msstate.edu

November 15, 2023

Dear Curriculum Committees:

The curriculum committee of the Department of Communication has met and approved the inclusion of CO 1003 Fundamentals of Public Speaking (or CO 1013 Introduction to Communication) for the new degree: Bachelor of Applied Science in Cybersecurity

Faculty Member	Approve	Faculty Member	Approve
Wendy Roussin, MFA *Associate Professor & Chair*	X	Jesse Wade, MFA *Assistant Clinical Professor*	X
Kevin William, PhD *Associate Professor*	X	Amy Knight, MA *Instructor II*	X
Holli Seitz, PhD *Associate Professor*	X	Josh Foreman, MFA *Instructor*	X
Heesook Choi, PhD *Assistant Professor*	X		

MISSISSIPPI STATE UNIVERSITY

COLLEGE OF EDUCATION
Department of Industrial Technology, Instructional Design,
and Community College Leadership
P.O. Box 9730
108 Herbert Street
Industrial Education Building
Mississippi State, MS 39762
P. 662.325.2281

Dr. Shahram Rahimi
Department Head, Professor
Computer Science and Engineering
Bagley College of Education
November 29, 2023

Dear Dr. Rahimi,
After discussion with both the Associate Dean for Education, Dr. Kimberly Hall, and the TECH program coordinator, Dr. Gregory Francom, I can confirm that we are supportive of using the following courses for the Bachelor of Applied Science in Cyber Security.

TECH 4563 Introduction to Data Networks, and
TECH 2123 Database Management

If you need any other documentation, please do not hesitate to ask.

Sincerely,

Dr. John Wyatt
Associate Professor – Industrial Technology
Interim Department Head
Tel: (662) 325 7257
Email: wyatt@colled.msstate.edu

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: Bagley College of Engineering **Department:** Computer Science & Engineering

Contact Person: Shahram Rahimi **E-mail:** rahimi@cse.msstate.edu

Mail Stop: 9637 **Date Initiated:** 08/02/20 **Effective Date:** 01/01/2024

Program Change Applies to the Following Campuses: (Mark all that apply)

- [x] Starkville
- [ ] Meridian
- [ ] Online
- [ ] Gulf Coast
- [ ] Study Abroad

Current Degree Program Name:

Major: Artificial Intelligence **Concentration:**

New Degree Program Name: Bachelor of Science

Major: Artificial Intelligence **Concentration:**

Summary of Proposed Changes:

The Department of Computer Science and Engineering proposes to establish a new BS in Artificial Intelligence degree program.

Approved:	Date:
Shahram Rahimi Digitally signed by Shahram Rahimi Date: 2023.11.06 16:12:29 -06'00'	
Department Head	
Dana Pomykal Franz Digitally signed by Dana Pomykal Franz Date: 2023.11.09 11:31:06 -06'00'	
Director of Academic Quality	
T.J. Jankun-Kelly Digitally signed by T.J. Jankun-Kelly Date: 2024.02.05 12:33:55 -06'00'	
Chair, College or School Curriculum Committee	
Kari Babski-Reeves for Jason Ketih Digitally signed by Kari Babski-Reeves for Jason Ketih Date: 2024.02.05 15:08:59 -06'00'	
Dean of College or School	
	March 28, 2024
Chair, University Committee on Courses and Curricula	
Chair, Graduate Council(if applicable)	
	April 12th, 2024
Chair, Deans Council	

NEW DEGREE OUTLINE FORM

Use the chart below to indicate your new 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. Expand rows as needed.

PROPOSED New Degree	
Degree: Bachelor of Science **Major:** Artificial Intelligence **Concentration:**	
The Bachelor of Science in Artificial Intelligence is a comprehensive degree program designed to equip students with the knowledge, skills, and expertise required to become proficient in design and development of Artificial Intelligence systems. This program provides a strong foundation in computer science, statistics and probability theory, data analytics, cognitive science, machine learning, robotics, ethics in AI, and specialized electives. Students will gain the core theoretical knowledge and hands-on experience through collaborative projects, AI capstone, and research opportunities, thereby preparing them for a wide array of careers in industries ranging from tech to healthcare.	
Proposed Curriculum Outline	**Required Hours**
English (General Education): EN 1103 English Composition I or EN 1104 Expanded English Composition I EN 1113 English Composition II or EN 1173 Accelerated Composition II	**6**
Creative Discovery (General Education): Any course satisfying Creative Discovery	**3**
Natural Sciences: (2 labs required from Gen Ed): CH 1213 Chemistry I CH 1211 Investigations in Chemistry I BIO 1144 Biology I	 3 1 4
Quantitative Reasoning (General Education): MA 1713 Calculus I	**3**
Humanities (General Education): Any 2 courses that satisfy the Humanities requirement	**6**
Social/Behavioral Sciences (General Education): Any 2 courses satisfying Social/Behavioral Sciences	**6**
Subtotal	**32**

PROPOSED New Degree	
Degree: Bachelor of Science **Major:** Artificial Intelligence **Concentration:**	
Major Core Courses:	
CSE 1284 Introduction to Programming	4
CSE 1384 Intermediate Computer Programming	4
CSE 2213 Methods & Tools in Software Development	3
CSE 2383 Data Structures and Analysis of Algorithms	3
CSE 2813 Discrete Structures	3
CSE 3683 AI Fundamentals	3
CSE 3763 Legal & Ethical Issues in Computing	3
CSE 3613 AI Capstone I	3
CSE 3623 AI Capstone II	3
CSE 4633 Introduction to Artificial Intelligence	3
CSE 4643 AI Robotics	3
CSE 4653 Cognitive Science	3
CSE 4663 Human Computer Interaction	3
CSE 4683 Machine Learning and Soft Computing	3
CSE 4693 Introduction to Machine Learning	3
CSE 4833 Introduction to Algorithms	3
GE 3513 Technical Writing	3
MA 1723 Calculus II	3
MA 3113 Linear Algebra	3
MA 4143 Graph Theory	3
IE 4113 Human Factors Engineering	3
IE 4613 Engineering Statistics I	3
IE 4623 Engineering Statistics II	3
IE 4733 Linear Programming	3
Subtotal	**74**
Cognitive Science Elective Choose from: PSY 3723 Cognitive Neuroscience PSY 4753 Applied Cognitive Psychology PSY 4713 Language & Thought PSY 4733 Memory	**3**
AI Electives Choose from: CSE 4293 AI for Cybersecurity IE 4683 Machine Learning with Industrial Engineering Applications IE 4743 Engineering Design Optimization MA 4183 Mathematical Foundations of Machine Learning PSY 4753 Applied Cog. Psychology (if not taken as Cognitive Science elective) PSY 3723 Cognitive Neuroscience (if not taken as Cognitive Science elective) PSY 4713 Language & Thought (if not taken as Cognitive Science elective)	**12**
Subtotal	**15**
Total Hours	**121**

STUDENT LEARNING OUTCOMES AND ASSESSMENT

1. Develop a strong understanding of software development, data structure, algorithms, statistics and probability theory as some of the foundations of design and development of AI systems. --> "Students will be able to demonstrate a strong understanding of software development, data structure, algorithms, statistics and probability theory as some of the foundations of design and development of AI systems."
2. Develop a strong foundation in the core principles of AI, including machine learning, data analytics, and Robotics. --> "Students will be able to demonstrate a strong foundation in the core principles of AI, including machine learning, data analytics, and Robotics."
3. Gain practical experience through real-world projects, internships, and research. --> "Students will be able to demonstrate that they have gained practical experience through real-world projects, internships, and research."
4. Understand the ethical, societal, and technical implications of AI. --> "Students will be able to demonstrate understand of the ethical, societal, and technical implications of AI."
5. Acquire teamwork and communication skills necessary for AI-related work. --> "Students will be able to demonstrate teamwork and communication skills necessary for AI-related works."
6. Become proficient in development and use of AI-related tools and programming languages. --> "Students will be able to demonstrate proficiency in development and use of AI-related tools and programming languages."

SUPPORT

Letters of support from the CSE Curriculum Committee and supporting departments (MA, IE, and PSY) are included.

PROPOSED 4-LETTER ABBREVIATION: BSAI

NEW ACADEMIC DEGREE PROGRAM PROPOSAL

Institutional Request Form – Appendix 8
(Submit in PDF format with signatures.)

Institution:	Mississippi State University
Date of anticipated implementation:	August 2024
Program title as it will appear on Academic Program Inventory, Diploma, and Transcript:	Artificial Intelligence
Name of degree(s) to be awarded:	Bachelor of Science
Six-digit CIP code:	11.1002
Total credit-hour requirement to earn the degree:	120
Responsible academic unit:	Computer Science and Engineering
Institutional contact:	Shahram Rahimi
Phone:	
Email:	
SACSCOC Substantive Change:	☒ Program proposed **IS NOT** a substantive change. ☐ Program proposed **IS** a substantive change.
Incremental, five-year cost of implementation:	Click or tap here to enter text.
Incremental, five-year per student cost of implementation:	Click or tap here to enter text.
Potential five-year, new revenue:	Click or tap here to enter text.
Potential new, five-year revenue per student:	Click or tap here to enter text.
Will it attract new students to the university?	☒ Yes ☐ No
List any institutions within the State offering similar programs:	None

Number of students expected to enroll in first 5 years:		**Number of students expected to graduate in first 5 years:**	
Year 1	15	**Year 1**	0
Year 2	20	**Year 2**	10
Year 3	20	**Year 3**	20
Year 4	25	**Year 4**	30
Year 5	25	**Year 5**	30
Total	105	**Total**	90

Program summary (include second majors completed, if applicable):
The Bachelor of Science in Artificial Intelligence is a comprehensive degree program designed to equip students with the knowledge, skills, and expertise required to become proficient in design and development of Artificial Intelligence systems. This program provides a strong foundation in computer science, statistics and probability theory, data analytics, cognitive science, machine learning, robotics, ethics in AI, and specialized electives. Students will gain the core theoretical knowledge and hands-on experience through collaborative projects, AI capstone, and research opportunities, thereby preparing them for a wide array of careers in industries ranging from tech to healthcare.

NEW ACADEMIC DEGREE PROGRAM PROPOSAL

Institutional Request Form – Appendix 8
(Submit in PDF format with signatures.)

The audit of recently approved academic programs ensures that the program outcomes are congruent with the Board-approved proposal.

Please respond to the questions on the following pages to aid the institution and IHL staff in making recommendations to the IHL Board of Trustees.

Chief Academic Officer Signature – Date

Institutional Executive Officer Signature – Date

NEW ACADEMIC DEGREE PROGRAM PROPOSAL

Institutional Request Form – Appendix 8
(Submit in PDF format with signatures.)

New Academic Degree Program Questions:

1 **Describe how the degree program will be administered including the name and title of person(s) who will be responsible for curriculum development and ongoing program review.**

The program will be administered through the Department of Computer Science and Engineering by the Department's Undergraduate Coordinator, Dr. Andy Perkins, and the Department Head, Dr. Shahram Rahimi. The curriculum will be managed by an AI Studies Committee responsible for this degree program and will be subject to annual review by this committee, CSE Committee of Whole and CSE's external advisory board. Accreditation will be sought through ABET, as soon as accreditation is available, and the program has its first graduates.

2 **Describe the educational objectives of the degree program including the specific objectives of any concentrations, emphases, options, specializations, tracks, etc.**

- Develop a strong understanding of software development, data structure, algorithms, statistics and probability theory as some of the foundations of design and development of AI systems.
- Develop a strong foundation in the core principles of AI, including machine learning, data analytics, and Robotics.
- Gain practical experience through real-world projects, internships, and research.
- Understand the ethical, societal, and technical implications of AI.
- Acquire teamwork and communication skills necessary for AI-related works.
- Become proficient in development and use of AI-related tools and programming languages.

3 **Describe any special admission requirements for the degree program including any articulation agreements that have been negotiated or planned.**

Applicants to the Bachelor of Science in Artificial Intelligence must have a GPA of 3.0 or higher as computed by Mississippi State University and must also have an ACT composite score of 25 or higher.

4 **Describe the professional accreditation that will be sought for this degree program. If a SACSCOC visit for substantive change will be necessary, please note.**

Accreditation will be sought through ABET, as soon as accreditation is available, and the program has its first graduates.

5 **Describe the curriculum for this degree program including the recommended course of study (appending course descriptions for all courses) and any special requirements such as clinical, field experience, community service, internships, practicum, a thesis, etc.**

An adequate preparation in computer science, math and statistics, and cognitive science subjects will be required. Students will be required to complete at least 120 hours of course work, including 32 hours of general education, 21 hours of math and statistics, 20 hours of computer science and engineering, 15 hours of cognitive science, ethics and human computing interactions, 21 hours of AI core, and 9 hours of AI electives.

Requirements:

General Education (32 hours)
- English Composition I & II (6 hours)
- Humanities Electives (6 hours)
- Fine Art Elective (3 hours)
- Social Science Electives (6 hours)
- Technical Writing (3 hours)
- Chemistry I and laboratory (4 hours)
- Biology I and Lab (4 hours)

Math and Statistics (21 hours)
- Calculus I & II (6 hours)
- Linear Algebra (3 hours)
- Graph Theory (3 hours)
- Engineering Statistics I&II (6 hours)
- Linear Programming (3 hours)

Computer Science Core (20 hours)
- Introduction to Programming (4 hours)
- Intermediate Programming (4 hours)
- Data Structures and Analysis of Algorithms (3 hours)
- Discrete Structures (3 hours)
- Methods and Tools (3 hours)
- Algorithms (3 hours)

Cognitive Science, Ethics and Human-Computer Interaction(15)
- Legal and Ethical Issues in Computer Science (3 hours)
- Human Factors Engineering (3 hours)
- Cognitive Science (3 hours)
- Human-Computer Interaction (3 hours)
- One of the following courses: Applied Cognitive Psychology OR Memory OR Language & Thoughts OR Cognitive Neuroscience (3 hours)

Artificial Intelligence Core (21)
- AI Fundamentals (3 hours)
- Introduction to Artificial Intelligence (3 hours)
- Introduction to Machine Learning (3 hours)
- AI Robotics (3 hours)
- Machine Learning and Soft Computing (3 hours)
- AI Capstone I & II (6 hours)

Artificial Intelligence Electives (11 hours)
- AI for Cybersecurity (3 hours)
- Engineering Design Optimization (3 hours)
- ML with Industrial Engineering Applications (3 hours)
- Mathematical Foundation of Machine Learning (3 hours)
- Cognitive Neuroscience (if not taken as core – 3 hours)
- Memory (if not taken as core – 3 hours)
- Language & Thoughts (if not taken as core - 3 hours))
- Applied Cognitive Psychology (if not taken as core – 3 hours)

6 **Describe the faculty who will deliver this degree program including the members' names, ranks, disciplines, current workloads, and specific courses they will teach within the program. If it will be necessary to add faculty in order to begin the program, give the desired qualifications of the persons to be added.**

Other than one new course (AI Foundation), all the required courses listed above under "general education", "math and statistics", "computer science core", "cognitive science, ethics & HCI" and most of the electives are currently being offered by faculty from the departments of computer science and statistics, math and statistics, industrial and systems engineering, and Psychology. Therefore, all these courses are already available to the students in this new program.

Regarding Artificial Intelligence courses, 5 AI faculty at computer science and engineering department and a few other faculty at Industrial and Systems Engineering will be covering these courses:

- Shahram Rahimi, Professor, Computer Science & Engineering, may teach: CSE 3633 (New-AI Foundation), CSE 4683, CSE 4633, CSE 4693
- Eric Hansen, Associate Professor, Computer Science and Engineering, may teach: CSE 3633 (New-AI Foundation), CSE 4633, CSE 4693
- Zhiqian Chen, Assistant Professor, Computer Science and Engineering, may teach: CSE 3633 (New-AI Foundation), CSE 4683, CSE 4633, CSE 4693
- Jingdao Chen: CSE 3633 (New-AI Foundation), CSE 4683, CSE 4633, CSE 4693, CSE 4643
- Sudip Mittal: CSE 3633 (New-AI Foundation), CSE 4633, CSE 4693, CSE 4284
- Haifeng Wang: ISE (New-AI Foundation), IE 4613, IE 4623, IE 4683
- Wenmeng Tian: ISE (New-AI Foundation), IE 4613, IE 4623, IE 4683
- Linkan Bian: IE 4613, IE 4623, IE 6733
- Junfeng Ma: IE 4613, IE 4623
- Mohammad Marufuzzaman: IE 4613, IE 4623, IE 4733
- Lesley Strawderman: IE 4613, IE 4623, IE 4113
- Nazanin Tajik: IE 4613, IE 4623, IE 4733

7 **Describe the library holdings relevant to the proposed program, noting strengths and weaknesses. If there are guidelines for the discipline, do current holdings meet or exceed standards?**

The Mississippi State Library has adequate holdings for the proposed program. The following databases and more from the Mississippi State Library are relevant to the BS in Artificial Intelligence:
• Academic Search Premier
• CloudSource+ and CloudSourceOA that search multiple databases, journal publishers, index open access scholarly journal articles, open textbooks, and open education resources
• eBooks from EBSCO
• ERIC
• Over 2.3 million volumes (MSU Library's online catalog); Over 11,000 print volumes in the local collections at MSU libraries'
• 200,000 electronic journals in an extraordinary range of computer science-related subjects and full-text content
• Access to electronic journals sufficient to meet the needs of baccalaureate cybersecurity studies.
• Discipline-based research guides covering resources in computer science, information technology, scholarly communication and more
• Access to virtual training opportunities through the library's MaxxSouth Digital Media Center (DMC) (ex.: Excel, Adobe InDesign and other technology) online.
• ILL and document delivery services for obtaining materials not owned by MSU Libraries.

8 **Describe the procedures for evaluation of the program and its effectiveness in the first five years of the program, including admission and retention rates, program outcome assessments, placement of graduates, changes in job market need/demand, ex-student/graduate surveys, or other procedures.**
Graduates will be assessed through course assessments (exams, quizzes, homework, and laboratory assignments). Periodically, these assessments will be collected and reviewed by the undergraduate studies committee and AI studies committee to determine the effectiveness of the teaching. Graduates will also be surveyed as to the strengths and weaknesses of the program. When available, accreditation through the ABET Computing Accrediting Commission will be sought, which will ensure that every six years the program will be assessed for quality. Additionally, changes in the job market will be monitored for increases and decreases, but quite frankly, the education system as it is today incapable of satisfying the job needs, so no decrease is anticipated into the medium future.

9 **What is the specific basis for determining the number of graduates expected in the first five years?**

Two main bases were considered to determine the number of graduates: AI Market demand and our previous experience with introduction of BS in Cybersecurity in Fall 2021.

The market demand for Artificial Intelligence skills has been robust and continues to grow. This is the main factor considered in determining the number of graduates expected in the first five years. AI has been incorporated into various industries, from healthcare and finance to automotive and entertainment. Additionally, what we learned from introducing BS in Cybersecurity in Fall 2021 was used to make these estimates. In fact, all the estimates in our application for the cybersecurity program ended up being underestimated. Today and after only 2 years, this program has over 100 students.

10 **Using expected enrollment, provide the total anticipated budget for the program including implementation and 4 subsequent years (total of 5 years) of operation; any anticipated direct, indirect, and incremental costs necessary to start the program; anticipated, incremental annual revenue based on student enrollment; and other sources of funding.**

Please explain what has been included in the costs and revenues.

Start-Up Costs: one-time costs associated with offering this program

Direct, Incremental Costs: additional annual costs to the university as a result of offering this program

Incremental Revenue: additional annual revenue assuming that this program will bring in new students paying full tuition

Non-Tuition Revenue: external funds, grants, contracts or other revenues attributable to the addition of this program

Differential: all revenues minus all costs

Year	Incoming Students	Total Enrollment	Start-Up Costs	A Additional Annual Costs	B Additional Annual Revenue	C Non-Tuition Revenue	(B+C)-A Differential
2024-25	15	15	$28,000	$0.00	$150,000.00	$0.00	$150,000.00
2025-26	20	35	$0	$28,000	$350,000.00	$0.00	$322,000.00
2026-27	20	55	$0	$28,000	$550000.00	$0.00	$522,000.00
2027-28	25	80	$0	$28,000	$800000.00	$0.00	$772000.00
2028-29	25	105	$0	$28,000	$900000.00	$0.00	$872,000.00
TOTAL	105	0	$28,000	$112,000	$2,750,000.00	$0.00	$2,638,000.00

11 **Program Demand: Select one or both of the following to address student demand:**

☐ **Survey of Student Interest**

Number of surveys administered: Click or tap here to enter text.
Number of completed surveys returned: Click or tap here to enter text.
Percentage of students interested in program: Click or tap here to enter text.

Include a brief statement that provides additional information to explain the survey.
Click or tap here to enter text.

☒ Market Analysis or Evidence of Labor Market Need

The proliferation of AI technologies, including machine learning, natural language processing, robotics, and computer vision, has created a high demand for professionals skilled in these areas. Here are some indicators: (1) AI professionals are offered lucrative salaries, a sign of high demand

and low supply. (2) A multitude of job boards and company websites feature increasing numbers of job postings requiring AI skills. (3) There has been a noticeable surge in startups focusing on AI, and investment in AI technologies is in the billions of dollars, signaling a strong future demand for AI skills. (4) AI is not industry-specific; it has applications in healthcare, automotive, finance, cybersecurity, and many other domains, diversifying the demand. (5) Global Demand has been increasing exponentially. This is not limited to specific geographic areas; countries around the world are investing in AI technologies. (6) Finally, government AI-related initiatives have been increasing. Various governments are incorporating AI in public services and defense, further bolstering demand for experts in the field.

12 **Employment Opportunities for Graduates (state, region, nation):**

The BS in AI program provides graduates with a strong foundation in the principles and applications of AI. This can open various employment opportunities across different sectors and regions. Here's a breakdown of potential opportunities:

Roles and Positions:
- AI Researcher: Work on the cutting edge of AI technologies to develop new algorithms and models.
Machine Learning Engineer: Design and implement machine learning models to solve specific tasks or improve existing ones.
- Data Scientist: Extract insights from large datasets using statistical and machine learning techniques.
Robotics Engineer: Design and build intelligent robots for a range of applications from manufacturing to healthcare.
- Natural Language Processing Engineer: Work on voice recognition, chatbots, and other applications that involve human-computer interaction.
- Computer Vision Engineer: Develop applications that enable computers to interpret and act on visual information from the world, such as facial recognition or image tagging.
- AI Product Manager: Oversee the development and deployment of AI-powered products or features.
- AI Ethics Specialist: Work on ensuring AI systems are designed and operated in an ethical and unbiased manner.

Sectors and Industries:
- Technology: Tech giants like Google, Apple, Microsoft, Amazon, and Facebook hire AI professionals for product development, research, and more.
- Finance: Banks and investment firms use AI for fraud detection, robo-advisors, and algorithmic trading.
- Healthcare: AI is used in diagnostics, personalized medicine, and patient management.
- Retail and E-commerce: Predictive analytics for inventory management, recommendation systems, and customer insights.
- Entertainment: AI-driven game design, content recommendation in streaming platforms, etc.
- Automotive: Development of autonomous vehicles and smart traffic systems.
- Agriculture: Precision farming using drones and predictive analytics for crop diseases.
- Manufacturing: Quality control, predictive maintenance, and smart manufacturing processes.
State, Region, Nation:

Research & Academia: Graduates can continue with advanced studies, pursuing a master's or Ph.D. in AI related fields. This can lead to roles in academic research, teaching, or working in corporate R&D departments.

Startups and Entrepreneurship: The dynamic nature of AI has led to a surge in startups that are trying to tackle niche problems or innovate in established sectors. With a solid AI background, graduates can venture into entrepreneurship or join early-stage startups.

NEW ACADEMIC DEGREE PROGRAM PROPOSAL

Institutional Request Form – Appendix 8

(Submit in PDF format with signatures.)

Considering Mississippi is a agriculture and manufacturing state, introduction of this program will provide these industries with trained individuals who can contribute to state's growth in these areas.

MISSISSIPPI STATE UNIVERSITY
JAMES WORTH BAGLEY COLLEGE OF ENGINEERING

DEPARTMENT OF INDUSTRIAL & SYSTEMS ENGINEERING

Dr. Kari Babski-Reeves
Professor, Head and Larry G Brown Endowed Professor
kari@ise.msstate.edu

October 16, 2023

RE: Letter of support for the BS in AI

Dear Dr Rahimi,

Please find this letter to be in support of the degree proposal Bachelor's of Science in Artificial Intelligence. The ISE department is committed to support the degree with the courses as outlined, developing new courses to fulfill core requirements and staffing those courses, and working with other stakeholders for the degree on additional electives. We are happy to participate and support this unique degree opportunity. If you have any questions or need additional information, please let me know.

Sincerely

Kari Babski-Reeves
Larry G Brown Endowed Professor and Head, Department of Industrial and Systems Engineering
Associate Dean, Bagley College of Engineering

MISSISSIPPI STATE UNIVERSITY

Department of Psychology
Magruder Hall
P.O. Box 6161
255 Lee Boulevard
Mississippi State, MS 39762
Phone: 662-325-3202
FAX: 662-325-7212

To: University Committee on Courses and Curricula

From: Department of Psychology

Date: October 26, 2023

Dear UCCC Committee Members:

The Psychology Department's Undergraduate Committee has reviewed the proposal for the Bachelor of Science in Artificial Intelligence degree program. We believe that the proposed program offers a valuable addition to the curriculum of Mississippi State University. Additionally, the inclusion of several upper-level psychology courses that typically experience lower enrollment counts allows for the opportunity for our department to gain exposure to students within additional majors, and to promote interdisciplinary studies and cross-listed coursework.

In short, we support this proposed BS in Artificial Intelligence program and appreciate your consideration of it. If you have any questions, or need additional information, please feel free to contact us.

Thank you for your time in considering this request.

Sincerely,

Danielle Nadorff, Ph.D.

Danielle Nadorff, Ph.D. (Committee chair)

Ph.D.

Hilary DeShong, Ph.D. (Committee member)

MISSISSIPPI STATE UNIVERSITY

COLLEGE OF ARTS & SCIENCES
Department of Mathematics & Statistics
P.O. Box MA
410 Allen Hall
Mississippi State, MS 39762
P. 662.325.3414
F. 662.325.0005
www.math.msstate.edu

August 3, 2023

Dr. Andy Perkins, Chair
University Committee on Courses and Curricula

Dear Dr. Perkins,

The Department of Mathematics and Statistics commits to supporting the BS in Artificial Intelligence in Computer Science and Engineering Department.

Sincerely,

Mohsen Razzaghi
Department Head

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 College of Professional and Continuing Studies **Department:** Professional Studies

Contact Person: Kenna Vowell **Mail Stop:** 9634 **E-mail:** kenna.vowell@msstate.edu

Nature of Change: Addition **Date Initiated:** 01/04/2024

Current Degree Program Name: N/A

Current Major: N/A

Current Concentration(s): N/A

Current Campus(es):

New Degree Program Name: Applied Leadership Certificate **Effective Date:** 06/03/24

Semester	Year
Summer	2024

Proposed Major:

Proposed Concentration(s): **Proposed Campus(es):** Starkville & Distance

Summary of Proposed Changes:

The college of Professional and Continuing Studies is adding a graduate certificate program, Applied Leadership. This program will be offered Campus 1 and 5.

Approved:	Date: (Day/Month/Year)
Department Head	03/01/2024
Director of Academic Quality	1/10/24
Chair, College or School Curriculum Committee	03/01/2024
Dean of College or School	04/01/2024
Chair, University Committee on Courses and Curricula	3/28/2024
Chair, Graduate Council (if applicable)	
Chair, Deans Council	April 12th, 2024

INTENT TO OFFER, MODIFY, OR DELETE A CERTIFICATE PROGRAM

Institutional Request Form – Appendix 16
(Submit in PDF format with signatures.)

Institution:	Mississippi State University
Date of anticipated implementation:	June 2024
Notification of intent to:	☒ Offer a certificate ☐ Modify an existing certificate ☐ Delete a certificate
Certificate title as it will appear on Academic Program Inventory:	Applied Leadership Certificate
Six-digit CIP code (and four-digit IHL sequence code if this is a modification or deletion):	52.0213
Total credit hours:	12
Unit head:	Kenna Vowell, Ph.D.
Phone:	662-325-1494
Email:	kenna.vowell@msstate.edu

OFFERING or MODIFYING a certificate - *Complete this section if the intent is to offer or modify a certificate.*

Vocational certificate:	☒ Yes	☐ No
Credit-bearing program:	☒ Yes	☐ No
Title IV financial aid eligible:	☒ Yes	☐ No

Which of the following best describes this certificate program?

☐ **Pre-Baccalaureate (Less than 1 Year)** - Undergraduate program with duration of less than one academic year; designed for completion in less than 30 credit hours

☐ **Pre-Baccalaureate (At Least 1 Year)** - Undergraduate program with duration of at least 1 year; designed for completion in at least 30 hours; does not meet requirements for associate or bachelor's degrees

☒ **Post-Baccalaureate** - Program designed beyond the baccalaureate degree but does not meet the requirements for a master's degree

☐ **Post-Master's** - Program designed beyond the master's degree but does not meet the requirements for a doctoral degree

☐ **Other** - Other certificate program not meeting one of the four criteria above

Program summary:

The Applied Leadership Certificate is a post-baccalaureate certificate that will be offered through the College of Professional and Continuing Studies at Mississippi State. The certificate will be a partnership with Echelon Front, a leadership consultant company. The program will consist of four courses designed to provide students with a comprehensive understanding of how to be effective and transformational leaders in a variety of organizations including the military, non-profit organizations, government entities, and corporations. The certificate prepares students for upward mobility in the following careers: military officers, directors in non-profit organizations, leaders in religious organizations, project managers, educational consultants, public managers, and leaders in private corporations.

The following courses will comprise the curriculum:

- PCS 6343 Foundations of Org. Leadership
- PCS 6313 Organizational Culture
- PCS 6323 Effective Organizational Discourse
- PCS 6333 Dichotomies of Leadership

Chief Academic Officer Signature – Date

Institutional Executive Officer Signature – Date

MISSISSIPPI STATE UNIVERSITY™
COLLEGE OF PROFESSIONAL AND
CONTINUING STUDIES

365 Barr Avenue
P.O. Box 5247
Mississippi State, MS 39762

February 5, 2024

To: University Committee on Courses and Curricula

Re: New Program Addition; Applied Leadership Graduate Certificate

The College of Professional and Continuing Studies Curriculum Committee has obtained support for the addition of the program, Applied Leadership certificate, from the College of Education and the College of Business.

Please let the committee know if there are any questions or concerns.

Sincerely,

Teresa Jayroe, Ph.D.
Dean, College of
Education

Scott Grawe, Ph.D.
Dean, College of
Business

Susan Seal, Ph.D.
Dean, College of
Professional and
Continuing Studies

MISSISSIPPI STATE UNIVERSITY™
COLLEGE OF PROFESSIONAL AND
CONTINUING STUDIES

365 Barr Avenue
P.O. Box 5247
Mississippi State, MS 39762

January 10, 2024

To: University Committee on Courses and Curricula

Re: New Program Addition; Applied Leadership Graduate Certificate

The College of Professional and Continuing Studies Curriculum Committee affirm support for the addition of the program, Applied Leadership certificate, , to be taught in our college.

Please let the committee know if there are any questions or concerns

Sincerely,

Kenna Vowell

Kenna Vowell, Ph.D., Instructor, Committee Chair

Sean M. Owen

Sean Owen, Ph.D., Associate Dean/Research Professor

Kali Dunlap

Kali Dunlap, Instructor

MISSISSIPPI STATE UNIVERSITY

DIVISION OF STUDENT AFFAIRS
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250 Bailey Howell Drive
Mississippi State, MS 39762
P. 662.325.6719
F. 662.325.6723
veterans.msstate.edu

February 26, 2024

To: University Committee on Courses and Curricula

RE: Support Letter for Applied Leadership Certificate and MAS in Organizational Leadership

The purpose of this letter is to share my support of and concurrence with the College of Professional and Continuing Studies' desire and effort to establish the Applied Leadership Certificate and the MAS in Organizational Leadership. In my role overseeing both the Center for America's Veterans and ROTC programs, I believe both programs will be highly beneficial for military-connected students and the broader student demographic.

We look forward to supporting the recruitment efforts for these programs and believe in their potential to impact students' readiness for leadership roles in various sectors. We are also dedicated to providing any additional assistance that may contribute to the success and expansion of these programs within the College of Professional and Continuing Studies.

Sincerely,
Andrew Rendon

Executive Director, Veterans and Military Affairs
MSU Center for America's Veterans
arendon@msstate.edu
662-325-6825

Applied Leadership Certificate - Program Outcome Mapping

Program Level Outcome	
PLO 1: Apply the core leadership principles established by Echelon Front to real-world scenarios.	
Course Level Outcome:	**Assessments:**
PCS 6343: CLO1– Utilize the Extreme Ownership Framework in various scenarios.	Role-Play Activities – Students will role-play complex scenarios that commonly occur in the workplace.
PCS 6333: CLO4 – Synthesize theoretical concepts to address real-world leadership challenges in their field.	Case Studies – Students will analyze case studies and apply leadership principles to propose solutions.
Program Level Outcome	
PLO 2: Analyze complex organizational challenges and use Echelon Front leadership strategies to propose solutions.	
Course Level Outcome:	**Assessments:**
PCS 6333: CLO2: Identify strategies for balancing their teams.	Leadership Challenge Project - Students will solve a complex leadership problem using Echelon Front principles.
PCS 6313: CLO1 – Explain how culture contributes to organizational challenges and success.	Culture Comparison Paper – Students will write a paper analyzing strong and toxic organizational cultures.
Program Level Outcome:	
PLO3: Critically assess existing leadership practices within organizational contexts and propose strategic enhancements.	
Course Level Outcome:	**Assessments:**
PCS 6323: CLO1: Assess the impact of miscommunication within an organization.	Miscommunication Impact Case Study – Students will analyze a case study focused on the impact of miscommunication.
PCS 6343: CLO2: Analyze the effects of decision-making in leadership.	Leadership Analysis Paper - Students will analyze leadership practices in accordance with the Echelon Front principles.

Justification for Program: This certificate was created in order to be directly aligned with the unique leadership requirements of military personnel and to be applicable to working adults seeking career advancement. Rooted in the proven principles and frameworks established by Echelon Front and CPCS faculty, which have demonstrated adaptability across diverse professional settings, the program caters to both military and civilian leadership roles. The program is also an entry point into graduate coursework for students coming from BAS majors. By acknowledging the time constraints of working adults and offering a flexible curriculum, the program addresses the needs of individuals seeking career progression without disrupting their current employment. The emphasis on practical application ensures that graduates can immediately implement leadership principles, contributing to improved decision-making, accountability, and organizational success. Furthermore, the certificate serves as a recognized credential, enhancing participants' resumes and positioning them for leadership roles within their respective fields. Overall, this program strategically meets the demands of its target audience, providing a valuable opportunity for professional development and credentialing in the dynamic landscape of leadership.

MISSISSIPPI STATE UNIVERSITY

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February 26, 2024

To: University Committee on Courses and Curricula

RE: Support Letter for Applied Leadership Certificate and MAS in Organizational Leadership

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We look forward to supporting the recruitment efforts for these programs and believe in their potential to impact students' readiness for leadership roles in various sectors. We are also dedicated to providing any additional assistance that may contribute to the success and expansion of these programs within the College of Professional and Continuing Studies.

Sincerely,
Andrew Rendon

Executive Director, Veterans and Military Affairs
MSU Center for America's Veterans
arendon@msstate.edu
662-325-6825