

Faculty Senate

December 4, 2019 Consent Agenda

All changes are effective Fall 2020, unless otherwise noted.

<u>Academic Affairs</u> (moved and seconded in committee) Proposals for change(s) in an undergraduate program

COLLEGE OF EDUCATION

1. Department of Foundations, Curriculum and Instruction

a. Special Education – Multi-Categorical (PreK-12), B.A. (Form B – ID#2423)

The program of study in special education focuses on the preparation of teachers of students with mild to moderate disabilities (e.g., autism, learning disabilities, intellectual [mental] disabilities, emotional disabilities and traumatic brain injury). Candidates who complete the program will be certified/licensed in grades PreK-12 in the area of multi-categorical disabilities. This program involves both in-class and field experiences that prepare candidates for this exciting and rewarding career field. Students must earn a 'C' or better in all foundation and major requirements courses. Students should plan carefully with their assigned advisers since some courses have prerequisites and are limited to specific semesters. With the exception of EDSP 200 Q* - Foundations of Special Education (3 credits), students may not participate in courses designated with the education/special education prefix (EDSP) until after being admitted to the professional program in teacher education.

Student Learning Outcomes

With a strong emphasis on research-based and evidenced-based practices, candidates who complete the requirements for a degree in special education mild to moderate disabilities (PreK-12) will:

1. Exhibit foundational knowledge of laws, issues and processes related to serving PreK-12 students with autism, learning disabilities, intellectual [mental] disabilities, emotional disabilities and traumatic brain injury;

- 2. Apply content knowledge to the teaching and learning process for PreK-12 students with autism, learning disabilities, intellectual [mental] disabilities, emotional disabilities and traumatic brain injury;
- 3. Plan for appropriate instructions in a manner that provides for access to the general education curriculum;
- 4. Select and implement norm-referenced and curriculum-based assessment results to develop appropriate individualized education programs;
- 5. Apply long-range planning skills to develop appropriate individualized education programs;
- 6. Provide credible evidence of the impact of instruction on PreK-12 student learning;
- 7. Plan and implement positive behavioral interventions and supports for students with challenging behavior;
- 8. Demonstrate professional behavior and dispositions in PreK-12 schools; and
- 9. Exhibit competencies expected of an entry-level special educator to teach students with mild to moderate disabilities.

Degree Requirements (120+ Credits)

Core Curriculum Requirements

Core Curriculum (38-40 Total Credit Hours)

Graduation Requirements

Graduation Requirements (3-7+ Credits) *

Special Education Foundation Courses (18-31 Credits) *

Minimum grade of 'C' is required.

General Content

Complete the following courses:

- Any biology and biology laboratory course (4 credits) *
- GEOG 121 World Regional Geography (3 credits)

Mathematical Concepts

Complete the following courses:

- MATH 201 Mathematics for Early Childhood and Elementary Education Majors I
 (3 credits) *
- MATH 202 Mathematics for Early Childhood and Elementary Education Majors II (3 credits)

Human Health and Behavior Content

Complete the following course:

• PSYC 101 - General Psychology (3 credits) *

Education Content

Complete the following courses:

- EDUC 111 Exploring Teaching as a Profession (3 credits)
- EDUC 204 Q* Computer Technology and Instructional Media (3 credits)
- EDUC 215 Q Schools & Diversity (3 credits)
- EDUC 335 Introduction to Educational Psychology (3 credits)
- EDUC 336 Introduction to Human Growth and Development (3 credits)

Note:

*Course credit hours only count once toward the total university graduation credit hour requirements. Click on Credit Sharing for more information.

Major Requirements (60 63 Credits)

Minimum grade of 'C' is required.

Complete the following courses:

- EDLL 314 Foundations in Reading and Emergent Literacy Development (3 credits)
- Education elective with adviser approval (3 credits)
- EDSP 200 Q* Foundations of Special Education (3 credits)
- EDSP 310 Q Theory to Practice: Field Experience (3 credits)
- EDSP 311 Characteristics and Instruction of Learning Disabilities & Emotional Disorders (3 credits)
- EDSP 312 Characteristics and Instruction of Intellectual Disabilities and Autism (3 credits)
- EDSP 320 Q Measuring Student Progress: Field Experience (3 credits)
- EDSP 321 Diagnostic Assessment in Special Education (3 credits)
- EDSP 322 Secondary Practices and Transition (3 credits)
- EDSP 323 Methods and Adaptations for Teaching Reading (K-12) (3 credits)
- EDSP 410 Q Action Research: Practicum (3 credits)
- EDSP 411 Collaboration and Consultation in Special Education (3 credits)
- EDSP 412 Applied Behavior Analysis for Teachers (3 credits)
- EDSP 413 Methods and Adaptations for Teaching Mathematics (K-12) (3 credits)
- EDSP 414 Instructional Planning (3 credits)
- EDLL 471 Assessment and Evaluation of Intermediate Literacy Development (3 credits)
- EDSP 420 Internship Seminar in Special Education (3 credits)
- EDSP 450 Q Internship in Special Education (9 credits)

Choose one course from the following:

- EDEL 486 Teaching Social Studies (3 credits)
- EDEL 488 Q* Teaching Elementary Science (3 credits)

Electives (2-11 0-8 Credits)

Total Credits Required: 120+

+ Students are advised to be aware that strict adherence to the prescribed courses as recommended by their advisers is necessary for graduation with 120 credit hours. If students cannot or do not follow the recommended courses, more than 120 credit hours will be necessary for meeting all program requirements

Academic Affairs (moved and seconded in committee)

Proposals for new undergraduate courses:

COLLEGE OF EDUCATION

1. Office of the Dean

a. EDUC 205 – Teacher Leadership Academy Seminar (Form C – ID# 2402)

Proposed catalog description: EDUC 205 - Teacher Leader Academy Seminar (0-2 credits) (Prereq: UNIV 110; student must be accepted into the Teacher Leader Academy) This course is designed to develop leadership and mentoring using articles, activities, and a variety of other assignments. This course helps students develop leadership qualities that support making wise choices in their personal and academic lives. Emphasis is placed on personal responsibility, self-management, community service, emotional intelligence, self-motivation, and leadership. S.

Course Prefix/Number: EDUC 205

Course Title: Teacher Leadership Academy Seminar **Primary Goal:** This course may be taken as an elective

Repeatable for Credit: No Course Equivalencies: None Pass/Fail Grading: No

Prerequisite(s): UNIV 110; student must be accepted into the Teacher Leader Academy

Corequisite(s): None

Number of credits: 2 credits

Cross-listing(s): None

Course Restriction(s): None

Estimated enrollment: 25 Prior enrollment in course: n/a Method of delivery: Classroom Semester(s) offered: Spring

Considered for the Core Curriculum: No

Considered for the QEP: No

2. Department of Foundations, Curriculum and Instruction

a. EDMU 479 – Internship in Music Education (Form C – ID# 2340)

Proposed catalog description: EDMU 479 - Internship in Music Education (9 credits) (Prereq: Successful completion of all professional education courses. Admission to the Internship) (Coreq: EDMU 496) This culminating experience in the Spadoni College of Education Teacher Education Program is comprised of a supervised teaching experience in Music Education at either the elementary, middle or secondary level. The internship's purpose is to transfer theory of the teacher preparation program into experiences in a real classroom and school environment. Candidates apply content and pedagogical knowledge and skills in the classroom setting under the close supervision of an experienced cooperating teacher and university supervisor. A critical component of the internship is the internship seminar for candidates seeking initial teacher certification at the undergraduate level. During seminars, candidates meet with program faculty and other candidates to establish links between theory and practice, to discuss issues of concern, and to receive information essential for transitioning from teacher candidate to teacher. S.

Course Prefix/Number: EDMU 479

Course Title: Internship in Music Education

Primary Goal: This course is required for a major

Repeatable for Credit: No Course Equivalencies: None Pass/Fail Grading: Yes

Prerequisite(s): Successful completion of all professional education courses. Admission to

the Internship

Corequisite(s): EDMU 496 Number of credits: 9 credits

Cross-listing(s): None

Course Restriction(s): None Estimated enrollment: 5

Prior enrollment in course: n/a Method of delivery: Classroom Semester(s) offered: Spring Considered for the Core Curriculum: No

Considered for the QEP: No

COLLEGE OF HUMANITIES & FINE ARTS

1. Department of Anthropology and Geography

a. GEOG 342 O* – Forests and People (Form C – ID# 2413)

Proposed catalog description: GEOG 342 Q* - Forests and People (3 credits) This course bridges natural and social science perspectives in Geography for a holistic examination of the complex relationship between forests and people. It explores the ways in which people use, manage, destroy, protect, and restore forests, highlighting the causes behind such activities, the social and ecological outcomes, and feedbacks generated. F, S, Su.

Course Prefix/Number: GEOG 342 Q*

Course Title: Forests and People

Primary Goal: This course can be taken as an elective or cognate

Repeatable for Credit: No Course Equivalencies: None Pass/Fail Grading: No Prerequisite(s): None

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None Estimated enrollment: 15 Prior enrollment in course: n/a Method of delivery: Classroom

Semester(s) offered: Fall, Spring, Summer **Considered for the Core Curriculum:** No

Considered for the QEP: Yes

b. GEOG 342L – Forests and People Lab (Form C – ID# 2414)

Proposed catalog description: GEOG 342L - Forests and People Lab (1 credit) (Prereq: Instructor permission required) (Co-req: GEOG 342 Q*) This optional lab course provides a

survey of the mixed methods used by geographers in the study of the relationship between forests and people. It includes on- and/or off-campus field experiences, which may include biophysical forest assessments, social research, and community organizing and outreach activities. F, S, Su.

Course Prefix/Number: GEOG 342L Course Title: Forests and People Lab

Primary Goal: This course can be taken as an elective or cognate

Repeatable for Credit: No **Course Equivalencies:** None

Pass/Fail Grading: No Prerequisite(s): None Corequisite(s): None

Number of credits: 1 credit Cross-listing(s): None

Course Restriction(s): None Estimated enrollment: 10 Prior enrollment in course: n/a

Method of delivery: This class may include lab work and field excursions

Semester(s) offered: Fall, Spring, Summer **Considered for the Core Curriculum:** No

Considered for the QEP: No

2. Department of Visual Arts

a. ARTH 398 – Study Abroad (Form C – ID# 2383)

Proposed catalog description: ARTH 398 - Study Abroad (3 credits) (=ARTD 398, ARTS 398) This course immerses students in the art, art history, and design of the host country, introducing them to its visual, cultural, and historical traditions and contemporary practices. Through first-hand experiences and applications, students learn how these traditions and practices compare to those of the United States. This course may be repeatable under different topics for up to 6 credit hours. F, S, Su.

Course Prefix/Number: ARTH 398

Course Title: Study Abroad

Primary Goal: This course may be taken as an elective or cognate

Repeatable for Credit: Yes Course Equivalencies: None Pass/Fail Grading: No

Prerequisite(s): None Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): ARTD 398, ARTS 398

Course Restriction(s): None Estimated enrollment: 15 Prior enrollment in course: n/a Method of delivery: Classroom

Semester(s) offered: Fall, Spring, Summer Considered for the Core Curriculum: No

Considered for the QEP: No

b. ARTS 398 – Study Abroad (Form C – ID# 2384)

Proposed catalog description: ARTS 398 - Study Abroad (3 credits) (=ARTD 398, ARTH 398) This course immerses students in the art, art history, and design of the host country, introducing them to its visual, cultural, and historical traditions and contemporary practices. Through first-hand experiences and applications, students learn how these traditions and practices compare to those of the United States. This course may be repeatable under different topics for up to 6 credit hours. F,S,Su

Course Prefix/Number: ARTS 398

Course Title: Study Abroad

Primary Goal: This course may be taken as an elective or cognate

Repeatable for Credit: Yes
Course Equivalencies: None

Pass/Fail Grading: No Prerequisite(s): None Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): ARTD 398, ARTH 398

Course Restriction(s): None Estimated enrollment: 15 Prior enrollment in course: n/a Method of delivery: Classroom

Semester(s) offered: Fall, Spring, Summer Considered for the Core Curriculum: No

Considered for the QEP: No

COLLEGE OF SCIENCE

1. Department of Mathematics and Statistics

a. STAT 390 – Case Studies in Statistics (Form C – ID# 2537)

Proposed catalog description: STAT 390 - Case Studies in Statistics (2 credits)(Prereq: STAT 316 with a grade of 'C' or better and STAT 318 with a grade of 'C' or better and at least two other 300 level statistics classes with a 'C' or better) Students synthesize information across many statistical methods through case studies. For each case study, students must determine the most appropriate approach to answer the researcher's questions using statistics. Students present their analysis and conclusions in a series of written and oral presentations. S.

Course Prefix/Number: STAT 390 Course Title: Case Studies in Statistics

Primary Goal: This course is required for a major

Repeatable for Credit: No Course Equivalencies: None Pass/Fail Grading: No

Prerequisite(s): STAT 316 with a grade of 'C' or better and STAT 318 with a grade of 'C'

or better and at least two other 300 level statistics classes with a 'C' or better

Corequisite(s): None

Number of credits: 2 credits

Cross-listing(s): None

Course Restriction(s): None Estimated enrollment: 20 Prior enrollment in course: n/a Method of delivery: Classroom Semester(s) offered: Spring

Considered for the Core Curriculum: No

Considered for the QEP: No

2. Department of Physics and Engineering Science

a. ENGR 333 – Engineering Fluids Mechanics (Form C – ID# 2499)

Proposed catalog description: ENGR 333 - Engineering Fluid Mechanics (3 credits). (Prereq: ENGR 244 and ENGR 323, or permission of the instructor) This course develops methods for analyzing fluid behavior while at rest or in motion starting from Newton's Laws and control volume concepts. Important representations for fluid kinematics are developed,

such as streamlines and students are introduced to the Reynold's Transport theorem. Energy and momentum methods of fluid dynamics problem solving are developed and applied to engineering problems in the design of pipe flow systems. S.

Course Prefix/Number: ENGR 333

Course Title: Engineering Fluid Mechanics

Primary Goal: This course is required for a major

Repeatable for Credit: No Course Equivalencies: None

Pass/Fail Grading: No

Prerequisite(s): ENGR 244 and ENGR 323, or permission of the instructor

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None Estimated enrollment: 20 Prior enrollment in course: n/a Method of delivery: Classroom Semester(s) offered: Spring

Considered for the Core Curriculum: No

Considered for the QEP: No

b. ENGR 102 – Engineering Graphics Communication (Form C – ID# 2501)

Proposed catalog description: ENGR 102 - Engineering Graphics Communication (3 credits) This course is a project-based introduction to engineering graphics using SolidWorks. Topics include sketching, 3D part and assembly creation, and documented drawings. Students utilize the principles of engineering graphics to visualize, communicate, and analyze solutions to engineering problems. F, S.

Course Prefix/Number: ENGR 102

Course Title: Engineering Graphics Communication

Primary Goal: This course is required for a major; this course is required for a minor

Repeatable for Credit: No Course Equivalencies: None Pass/Fail Grading: No

Pass/Fail Grading: No Prerequisite(s): None Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None **Estimated enrollment:** 30

Prior enrollment in course: n/a **Method of delivery:** Classroom **Semester(s) offered:** Fall, Spring

Considered for the Core Curriculum: No

Considered for the QEP: No

c. ENGR 244 – Engineering Mechanics II: Dynamics (Form C – ID# 2502)

Proposed catalog description: ENGR 244 - Engineering Mechanics II: Dynamics (3 credits) (Prereq: ENGR 234 or permission of the instructor). Kinematics of particles: coordinate systems, relative and dependent motions, Kinetics of particles: Newton's Second Law, Kinetics of particles: work and energy methods, Kinetics of particles: impulse and momentum methods, Kinematics of rigid bodies: absolute and relative motion, Review of mass moment of inertia, Planar kinetics of rigid bodies: Newton's Second Law, Planar kinetics of rigid bodies: work and energy methods, Planar kinetics of rigid bodies: impulse and momentum methods, Vibrations: free and forced. S.

Course Prefix/Number: ENGR 244

Course Title: Engineering Mechanics II: Dynamics **Primary Goal:** This course is required for a major

Repeatable for Credit: No Course Equivalencies: None Page/Feil Creding: No

Pass/Fail Grading: No

Prerequisite(s): ENGR 234 or permission of the instructor

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None Estimated enrollment: 30 Prior enrollment in course: n/a Method of delivery: Classroom Semester(s) offered: Spring

Considered for the Core Curriculum: No

Considered for the OEP: No

d. ENGR 302 - Materials Science for Engineers (Form C – ID# 2503)

Proposed catalog description: ENGR 302 - Materials Science for Engineers (3 credits) (Prereq: junior standing or permission of the instructor) This introductory course in materials science is designed primarily for engineering students who wish to understand the relationships between a material's structure, processing and properties (electrical,

mechanical, and thermal). All levels of structure are considered: from macro structures easily visible to the eye through electronic structure of atoms. F.

Course Prefix/Number: ENGR 302

Course Title: Materials Science for Engineers **Primary Goal:** This course is required for a major

Repeatable for Credit: No Course Equivalencies: None Pass/Fail Grading: No

Prerequisite(s): junior standing or permission of the instructor

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None Estimated enrollment: 30 Prior enrollment in course: 10 Method of delivery: Classroom

Semester(s) offered: Fall

Considered for the Core Curriculum: No

Considered for the QEP: No

e. ENGR 323 – Engineering Thermodynamics and Heat Transfer (Form C – ID# 2505)

Proposed catalog description: ENGR 323 - Engineering Thermodynamics and Heat Transfer (3 credits) (Prereq: PHYS 211/PHYS 211L with a grade of 'C' or better, or permission of the instructor) Introduction to thermodynamics and heat transfer: properties of liquids and gases, first and second law analysis, introduction to cycles for power and refrigeration, heat flow by conduction and radiation, and convective heat flow and heat exchangers. F.

Course Prefix/Number: ENGR 323

Course Title: Engineering Thermodynamics and Heat Transfer

Primary Goal: This course is required for a major

Repeatable for Credit: No Course Equivalencies: None

Pass/Fail Grading: No

Prerequisite(s): PHYS 211/PHYS 211L with a grade of 'C' or better, or permission of the

instructor

Corequisite(s): None

Number of credits: 3 credits Cross-listing(s): None

Course Restriction(s): None

Estimated enrollment: 30 Prior enrollment in course: n/a Method of delivery: Classroom

Semester(s) offered: Fall

Considered for the Core Curriculum: No

Considered for the QEP: No

f. ENGR 397 – Independent Research (Form C – ID# 2506)

Proposed catalog description: ENGR 397 - Independent Research (1-7 credits) (Prereg: permission of the instructor and approved contract) Directed study and/or research on a specific topic. F, S, Su.

Course Prefix/Number: ENGR 397 **Course Title:** Independent Research

Primary Goal: This course may be taken as an elective

Repeatable for Credit: Yes **Course Equivalencies:** None Pass/Fail Grading: No

Prerequisite(s): permission of the instructor and approved contract

Corequisite(s): None

Number of credits: 1-7 credits

Cross-listing(s): None

Course Restriction(s): None **Estimated enrollment:** 5

Prior enrollment in course: n/a

Method of delivery: Faculty directed, independent research/study

Semester(s) offered: Fall, Spring, Summer **Considered for the Core Curriculum:** No

Considered for the QEP: No

g. ENGR 495 – Engineering Internship (Form C – ID# 2508)

Proposed catalog description: ENGR 495 Engineering Internship (1-10 credits) (Course Restrictions: permission of major advisor and approved contract) Students are professionally supervised in an approved external or campus-based organization while working 50 hours during a semester for each credit hour enrolled. Three forms must be appended to this syllabus for a complete internship application. Students are required to read and sign form; Code of Professional and Ethical Conduct for Student Interns. Students must complete and sign the Internship Learning Contract, and obtain signatures from the Employer Supervisor and Faculty Advisor OR Engineering Program Director. Finally, Students must obtain a Memorandum of Understanding signed by their Employer Supervisor and Academic Advisor or Engineering Program Director. During the internship period, students are required to maintain an Engineering Workplace Competencies Gap Analysis Worksheet and Internship Work Hours Log. The Employer Supervisor will also complete the Engineering Workplace Competencies Gap Analysis Worksheet to assess the student's performance. The course may be repeated for up to 10 total credit hours. F, S, Su.

Course Prefix/Number: ENGR 495 Course Title: Engineering Internship

Primary Goal: This course is required for a major

Repeatable for Credit: Yes Course Equivalencies: None Pass/Fail Grading: No

Prerequisite(s): permission of major advisor and approved contract

Corequisite(s): None

Number of credits: 1-10 credits

Cross-listing(s): None

Course Restriction(s): None Estimated enrollment: 10 Prior enrollment in course: n/a Method of delivery: Internship

Semester(s) offered: Fall, Spring, Summer **Considered for the Core Curriculum:** No

Considered for the QEP: No

h. ENGR 199 – Cohort Grand Challenge I (Form C – ID# 2515)

Proposed catalog description: ENGR 199 - Cohort Grand Challenge I (1 credits) Great engineering achievements such as safe drinking water and electricity have revolutionized society. While these achievements are remarkable, future engineers are faced with many more great challenges and opportunities yet to be realized. With input from people around the world, an international group of leading technological thinkers were asked to identify the Grand Challenges for Engineering in the 21st century. Their 14 game-changing goals for improving life on the planet, are introduced in this course as a means to introducing complex engineering problems, how to identify and formulate them by applying principles of engineering, science, and mathematics. F.

Course Prefix/Number: ENGR 199 Course Title: Cohort Grand Challenge I

Primary Goal: This course is required for a major, this course is required for a minor

Repeatable for Credit: No Course Equivalencies: None Pass/Fail Grading: No Prerequisite(s): None Corequisite(s): None

Number of credits: 1 credit Cross-listing(s): None

Course Restriction(s): None Estimated enrollment: 30 Prior enrollment in course: n/a Method of delivery: Classroom

Semester(s) offered: Fall

Considered for the Core Curriculum: No

Considered for the OEP: No

i. ENGR 299 – Cohort Grand Challenge II (Form C – ID# 2516)

Proposed catalog description: ENGR 299 - Cohort Grand Challenge II (1 credit) (Prereq: ENGR 199 or permission of the instructor) In this part II of the two-course sequence, students develop and propose solutions to their complex problem identified and formulated in ENGR 199 by applying principles of engineering, science, and mathematics. Solution must meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors. F.

Course Prefix/Number: ENGR 299 Course Title: Cohort Grand Challenge II

Primary Goal: This course is required for a major, this course is required for a minor

Repeatable for Credit: No Course Equivalencies: None

Pass/Fail Grading: No

Prerequisite(s): ENGR 199 or permission of the instructor

Corequisite(s): None

Number of credits: 1 credit Cross-listing(s): None Course Restriction(s): None

Estimated enrollment: 30
Prior enrollment in course: n/a
Method of delivery: Classroom

Semester(s) offered: Fall

Considered for the Core Curriculum: No

Considered for the QEP: No

j. ENGR 203 – Engineering Professionalism and Pathways (Form C – ID# 2524)

Proposed catalog description: ENGR 203 - Engineering Professionalism and Pathways (3 credits) This course provides an overview of professional and ethical responsibilities of scientists and engineers; the impact of engineering solutions in a global and societal context; contemporary issues; working in a diverse team environment, and life-long learning and career skills. F.

Course Prefix/Number: ENGR 203

Course Title: Engineering Professionalism and Pathways

Primary Goal: This course is required for a minor; this course may be taken as an elective

Repeatable for Credit: No Course Equivalencies: None Pass/Fail Grading: No Prerequisite(s): None Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None Estimated enrollment: 20 Prior enrollment in course: 13 Method of delivery: Classroom Semester(s) offered: Fall

Considered for the Core Curriculum: No

Considered for the QEP: No

k. ENGR 356 – Supply Chain Engineers (Form C – ID# 2525)

Proposed catalog description: ENGR 356 - Supply Chain Engineering (3 credits) (Prereq: ENGR 201 or permission of the instructor). In this course, we will study manufacturing and logistic activities across the global supply chain. Emphasis is on supply chain technical design, implementation, and safety functions. Topics include transportation and distribution networks, inventory requirements, demand planning, materials handling and warehousing, supply chain contracts, manufacturing flexibility, product design, and using available SAP or other ERP systems. F.

Course Prefix/Number: ENGR 356 Course Title: Supply Chain Engineering

Primary Goal: This course may be taken as an elective

Repeatable for Credit: No Course Equivalencies: None Pass/Fail Grading: No

Prerequisite(s): ENGR 201 or permission of the instructor

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None Estimated enrollment: 15 Prior enrollment in course: n/a Method of delivery: Classroom

Semester(s) offered: Fall

Considered for the Core Curriculum: No

Considered for the QEP: No

<u>Academic Affairs</u> (moved and seconded in committee)

Proposals for change(s) in, restoration of, or removal of undergraduate courses:

COLLEGE OF EDUCATION

1. Department of Foundations, Curriculum and Instruction

a. EDSP 499 – Practicum in Severe Disabilities

Proposed revision(s): Other Course Change (Form A – ID# 2408)

Course Action(s): Change to credits: FROM: 1 credit TO: 1-3 credits; Change to course repeatability: FROM: None TO: This course is repeatable for up to 3 credits in varying field placement settings

Proposed catalog description:

EDSP 499 - Practicum in Severe Disabilities (1-3 credits) (Prereq: EDSP 200) This course is a supervised field experience requiring six to ten full school days in a public school classroom that serves students with significant intellectual and multiple disabilities. In this field experience, teacher candidates pursuing the add-on license in severe disabilities make programmatic decisions and design instructional plans for students with significant intellectual and multiple disabilities under the supervision of a licensed special education teacher. Further, teacher candidates pursuing the add-on license in severe disabilities implement evidence-based practices and deliver instructional content that meets individual needs and grade-level academic standards for students with significant intellectual and multiple disabilities. This course is repeatable for up to 3 credits in varying field placement settings. F, S.

b. EDSP 413 – Methods and Adaptations for Teaching Mathematics (PK-12)

Proposed revision(s): Other Course Change (Form A – ID# 2409)

Course Action(s): Restore course to catalog

Proposed catalog description:

EDSP 413 - Methods and Adaptations for Teaching Mathematics (PK-12) (3 credits) (Prereq: Admission to the Professional Program in Teacher Education) This course prepares candidates to teach mathematics, problem solving, and reasoning skills to students with mild to moderate disabilities PK - 12. The course focuses on national mathematics curriculum standards, research-based instruction, high-stakes assessment, functional mathematics, and problem solving with an emphasis on the effects of disabilities on mathematics achievement. The problem-solving strand extends to include cross-curricular applications of reasoning skills. S.

COLLEGE OF HUMANITIES AND FINE ARTS

1. Department of Anthropology and Geography

a. ANTH 300 – Human Landscapes

Proposed revision(s): Add Course to QEP (Form A – ID# 2463)

Proposed catalog description: ANTH 300 Q* - Human Landscapes (3 credits) (=GEOG 300) (Prereq ANTH/GEOG 120) This course intensively examines the way in which anthropologists and geographers use landscape analysis in studies of the interaction between people and their environment. We discuss the formation of anthropogenic landscapes and feedback cycles, and the way in which this affects human behaviors past and present. Case studies can include agriculture, climate change, pollution, population, urbanization, and the Anthropocene. F, S, Su.

b. GEOG 300 – Human Landscapes

Proposed revision(s): Other Course to QEP (Form A – ID# 2466)

Proposed catalog description:

GEOG 300 Q* - Human Landscapes (3 credits) (=ANTH 300) (Prereq: ANTH/GEOG 120) This course intensively examines the way in which anthropologists and geographers use landscape analysis in studies of the interaction between people and their environment. We discuss the formation of anthropogenic landscapes and feedback cycles, and the way in which this affects human behaviors past and present. Case studies can include agriculture, climate change, pollution, population, urbanization, and the Anthropocene. F, S, Su.

2. Department of Visual Arts

a. ATRD 304 – Motion Design I

Proposed revision(s): Other Course Change (Form A – ID# 2196)

Course Action(s): Change to Prerequisite: FROM: ARTD 202 TO: Must be a BFA in Visual Communication Design major; Change to course title: FROM: Motion Design I

TO: Motion Design

Proposed catalog description:

ARTD 304 - Motion Design (3 credits) (Prereq: Must be a BFA in Visual Communication Design major) A beginning exploration of design using animation, sound and design for TV, film and web with an emphasis on the viewer's experience. Students gain knowledge of the design process for time-based media by developing storyboard concepts and turning them into final movies. S.

b. ARTD 382 – Sculpture II

Proposed revision(s): Other Course Change (Form A – ID# 2476)

Course Action(s): Change to Prerequisite: FROM: ARTS 208 or permission of instructor TO: ARTS 208; Change to course title: FROM: Objective Sculpture TO:

Sculpture II; Change to course description.

Proposed catalog description:

ARTS 382 - Sculpture II (3 credits) (Prereq: ARTS 208) This course investigates the sculptural object from a contemporary stance. Students experiment with a wide range of scale, format, materials and media options, with an emphasis on the conceptual impact of personal objects. Presentations and readings provide historical and contemporary context for a better understanding of sculpture as object. F,S.

c. ARTD 481 – Sculpture III

Proposed revision(s): Other Course Change (Form A – ID# 2477)

Course Action(s): Change to Prerequisite: FROM: ARTS 208 or permission of instructor TO: ARTS 382; Change to course title: FROM: Experimental Sculpture TO: Sculpture III; Change to course description.

Proposed catalog description:

ARTS 481 - Sculpture III (3 credits) (Prereq: ARTS 382) This course explores the theory and practice of installation and site specificity. Students work in the extended mediums of site, space, light, sound and performance, using time-based technologies such as digital audio and video. F, S

d. ARTD 487 – Concepts in Form

Proposed revision(s): Other Course Change (Form A – ID# 2478)

Course Action(s): Change to Prerequisite: FROM: ARTS 208 or permission of instructor TO: Permission of instructor; Change to course title: FROM: Concepts in Sculpture TO: Concepts in Form; Change to course repeatability: FROM: None TO: This course is repeatable for up to 9 credits if taught by different faculty; Change to course description.

Proposed catalog description:

ARTS 487 - Concepts in Form (3 credits) (Prereq: permission of instructor) This course explores approaches utilized in contemporary art, such as movement, installation, scale, function and material. Concepts are explored through exercises, with the intent to better understand how they can be useful in self-expression. Additionally, investigation into how contemporary artists utilize these techniques give context to the work being done in class. This course is repeatable for up to 9 credits if taught by different faculty. F, S.

COLLEGE OF SCIENCE

1. Department of Health Sciences

a. PUBH 201 – Philosophy and Principles of Public Health

Proposed revision(s): Add Course to Core (Form A – ID# 2428)

Course Action(s): Add course to Core; Change to Prerequisite: FROM: PUBH 121 TO:

None

Proposed catalog description:

PUBH 201 - Philosophy and Principles of Public Health (3 credits) An exploration of underlying philosophies and principles of public health. An overview of social, cultural, and physical environmental factors which influence perceptions and valuation of health, and condition responses to health-related knowledge. F, S.

2. Department of Physics and Engineering Science

a. PHYS 211 - Essentials of Physics and Engineering Science

Proposed revision(s): Other Course Change (Form A – ID# 2494)

Course Action(s): Change to Prerequisite: **FROM:** MATH 160 with a grade of 'C' or better, or PHYS 137 with a grade of 'C' or better and co-requisite MATH 160 **TO:** None;

Change to Corequisite: **FROM:** None **TO:** PHYS 211L and MATH 160

Proposed catalog description:

PHYS 211 - Essentials of Physics I (3 credits) (Coreq: PHYS 211L and MATH 160) An introductory course for scientists and engineers. Topics covered include kinematics, dynamics, energy, and rotational mechanics. F, S, Su.

b. ENGR 235 – Electric Circuits

Proposed revision(s): Other Course Change (Form A – ID# 2495)

Course Action(s): Change to Prerequisite: FROM: PHYS 137 and MATH 160, or PHYS 212 TO: PHYS 137 and MATH 160, or PHYS 212 or PHYS 214, or permission of the instructor

Proposed catalog description:

ENGR 235 - Electric Circuits (3 credits) (=PHYS 235) (Prereq: PHYS 137 and MATH 160, or PHYS 212 or PHYS 214, or permission of the instructor) This course is an introduction to electrical circuit theory and its application to practical direct and alternating current circuits. Topics include: Kirchhoff's laws, fundamental principles of network theorems, transient and steady-state response of RC, RL and RLC circuits by classical methods, time-domain and frequency-domain relationships, phasor analysis and power. S.

c. PHYS 310 – Mathematical Methods in Physics

Proposed revision(s): Other Course Change (Form A – ID# 2496)

Course Action(s): Change to Prerequisite: FROM: PHYS 212 or PHYS 213, and MATH 161 TO: PHYS 212 or PHYS 213 or ENGR 244, and MATH 161; Change to course title: FROM: Mathematical Methods in Physics TO: Mathematical Methods for Physicists and Engineers

Proposed catalog description:

PHYS 310 - Mathematical Methods for Physicists and Engineers (3 credits) (Prereq: PHYS 212 or PHYS 213 or ENGR 244, and MATH 161) Physics applications of vector calculus, infinite series, complex analysis, differential equations, orthogonal functions, integral equations, linear algebra, and calculus of variations. S.

d. PHYS 351 – Computational Methods in Physics

Proposed revision(s): Other Course Change (Form A – ID# 2497)

Course Action(s): Change to course title: **FROM:** Computational Methods in Physics **TO:** Computational Methods for Physicists and Engineers

Proposed catalog description:

PHYS 351 - Computational Methods for Physicists and Engineers (3 credits) (Prereq: PHYS 212 or PHYS 214) This course introduces students to the computational tools that

physicists routinely use to analyze and to codify the foundational principles of physics. By the end of the semester a student completing this course is able to perform order-of-magnitude calculations; design and write computer programs that simulate physical systems described by multiple variables; and analyze a set of noisy data. The communication and synthesis of scientific knowledge is highlighted throughout the course via formal written reports that describe the theoretical analysis of a physical system. F.

d. PHYS 352 – Experimental Methods in Physics

Proposed revision(s): Other Course Change (Form A – ID# 2498)

Course Action(s): Change to Prerequisite(s): FROM: PHYS 212 or PHYS 213 TO: PHYS 212 or PHYS 213 or PHYS 214; Change to course title: FROM: Experimental Methods in Physics TO: Experimental Methods for Physicists and Engineers; Change to

term offered: **FROM:** Fall **TO:** Spring

Proposed catalog description:

PHYS 352 - Experimental Methods for Physicists and Engineers (3 credits) (Prereq: PHYS 212 or PHYS 213 or PHYS 214) This course focuses on the processes and methods in experimental physics. In particular, students acquire experimental data, recognize patterns and trends within the experimental data, develop models for physical processes, and fit these models to data. Observation, testing, and application experiments are discussed, and students are assessed on their ability to design and conduct these types of experiments. Students also study and apply topics in error analysis, such as the proper reporting of uncertainties, error propagation, statistical analysis, and normal distributions. The communication and synthesis of scientific knowledge is highlighted throughout the course via formal written reports on experimental design and results. S.

e. ENGR 399 Q* – Integrated Science and Design

Proposed revision(s): Other Course Change (Form A – ID# 2507)

Course Action(s): Change to Prerequisite(s): FROM: permission of the instructor and approved contract TO: Senior status or permission of the instructor and approved contract; Change to course credits: FROM: 1-3 credits TO: 2; Change to course number: FROM: ENGR 399 Q* TO: ENGR 399 Q

Proposed catalog description:

ENGR 399 Q - Integrated Science and Design (2 credits) (Prereq: Senior status or permission of the instructor and approved contract) In this first of the two-course capstone sequence, students initiate culminating major engineering design projects. Projects can be developed from experiential opportunities, using concepts learned in foundational science, engineering science and advanced elective courses and/or a contemporary community problem. Students will use the engineering design approach to

identify, formulate the specific problem under consideration and propose solutions by applying principles of engineering, science, and mathematics. F, S, Su.

f. ENGR 201 – Engineering Problem Solving

Proposed revision(s): Other Course Change (Form A – ID# 2511)

Course Action(s): Change to Prerequisite(s): FROM: ENGR 101 TO: ENGR 101 or permission of instructor

Proposed catalog description:

ENGR 201 - Engineering Problem Solving (3 credits) (Prereq: ENGR 101 or permission of the instructor) In this course, students work in multi-disciplinary teams to formulate and solve engineering problems using robotics systems. The course covers reading, interpreting, and writing programs, debugging, loops, and conditional statements. Project management principles are also introduced as the framework in which group members cooperate. The course culminates in a design challenge that requires teams to devise a system, component, or process to meet desired needs with given constraints. F, S

g. ENGR 499 Q - Senior Design

Proposed revision(s): Other Course Change (Form A – ID# 2513)

Course Action(s): Change to Prerequisite(s): FROM: None TO: ENGR 399 Q or

permission of instructor; Change to course credits: FROM: 3 TO: 2

Proposed catalog description:

ENGR 499 Q - Senior Design (2 credits) (Prereq: ENGR 399Q or permission of the instructor) In this second of the two-course capstone sequence, students incorporate appropriate engineering standards and multiple constraints into their developing project. Students apply the engineering design approach to produce solutions that meet specific client needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors. This major design experience serves to integrate the knowledge and skills that students have developed in earlier course work through the completion of an original project. Students will be required to utilize project management principles throughout the experience and develop a detailed report to be presented both orally in a public forum and in written form. F, S, Su.

h. PHYS 214 – Fundamentals of Physics II

Proposed revision(s): Other Course Change (Form A – ID# 2514)

Course Action(s): Change to Prerequisite(s): FROM: PHYS 211/PHYS 211L with a grade of 'C' or better TO: MATH 160 with a grade of 'C' or better and PHYS 211/PHYS 211L with a grade of 'C' or better

Proposed catalog description:

PHYS 214 - Fundamentals of Physics II (3 credits) (Prereq: MATH 160 with a grade of 'C' or better and PHYS 211/PHYS 211L with a grade of 'C' or better) (Coreq: PHYS 214L) A continuation of calculus-based for physics, engineering, and other interested science students. Topics covered include electricity, magnetism, circuits, and relativity. S.

i. PHYS 212 – Essentials of Physics II

Proposed revision(s): Other Course Change (Form A – ID# 2519)

Course Action(s): Change to Prerequisite(s): **FROM:** PHYS 211/PHYS 211L with a grade of 'C' or better **TO:** MATH 160 with a grade of 'C' or better and PHYS 211/PHYS 211L with a grade of 'C' or better

Proposed catalog description:

PHYS 212 - Essentials of Physics II (3 credits) (Prereq: MATH 160 with a grade of 'C' or better and PHYS 211/PHYS 211L with a grade of 'C' or better) (Coreq: PHYS 212L) A continuation of PHYS 211 for science majors. Topics covered include fluids, thermodynamics, wave motion, electricity, and magnetism. F, S, Su.

j. PHYS 213 – Fundamentals of Physics I

Proposed revision(s): Other Course Change (Form A – ID# 2520)

Course Action(s): Change to Prerequisite(s): FROM: PHYS 211/PHYS 211L with a grade of 'C' or better TO: MATH 160 with a grade of 'C' or better and PHYS 211/PHYS 211L with a grade of 'C' or better

Proposed catalog description:

PHYS 213 - Fundamentals of Physics I (3 credits) (Prereq: MATH 160 with a grade of 'C' or better and PHYS 211/PHYS 211L with a grade of 'C' or better) (Coreq: PHYS 213L) A continuation of calculus-based physics for physics, engineering, and other interested science students. Topics covered include oscillation, fluids, thermodynamics, wave motion, and optics. F.

k. ENGR 101 – Introduction to Engineering

Proposed revision(s): Other Course Change (Form A – ID# 2544)

Course Action(s): Change to course title: FROM: Introduction to Engineering TO:

Inquiring Minds Want to Design: An Introduction to Engineering

Proposed catalog description:

ENGR 101 - Inquiring Minds Want to Design: An Introduction to Engineering (3 credits) Students are introduced to the engineering profession and the engineering design process. The course teaches students about engineering teamwork and general design concepts through mini-design projects, and enhances students' communication skills (through

several written and oral reports) that are crucial in engineering. Professional ethics are emphasized. Communication Intensive. F, S.

1. ENGR 234 – Statics

Proposed revision(s): Other Course Change (Form A – ID# 2545)

Course Action(s): Change to Prerequisite(s): FROM: PHYS 211 TO: PHYS 211 or permission of instructor; Change to course title: FROM: Statics TO: Engineering

Mechanics I: Statics

Proposed catalog description:

ENGR 234 - Engineering Mechanics I: Statics (=PHYS 234) (3 credits) (Prereq: PHYS 211 or permission of instructor) This course deals with systems of forces acting on particles and rigid bodies at rest. The course addresses the finding of resultant forces and torques for various bodies. The covered topics include concentrated and distributed forces, equilibrium in two-and three-dimensions, moments, couples, and other key principles used in engineering design of structures that must remain static while bearing stress or performing a task. F.

3. Department of Sociology

a. SOC 320 – Individual and Society

Proposed revision(s): Other Course Change (Form A – ID# 2541)

Course Action(s): Change to Prerequisite(s): FROM: SOC 101 TO: SOC 101 or SOC 102

Proposed catalog description:

SOC 320 - Individual and Society (3 credits) (Prereq: SOC 101 or SOC 102) Selected theoretical orientations, methodological procedures and illustrative substantive data pertaining to the relations between the individual and society. Offered as needed.

Graduate Council (moved and seconded in committee)

Proposal(s) for change(s) in a graduate program:

COLLEGE OF EDUCATION

1. Department of M.A.T., Leadership, I.T., Ph.D.

a. Doctor of Philosophy in Education, Ph.D. (Form B – ID# 81)

Admission Requirements

All applicants to the Interdisciplinary Ph.D. in Education must meet the Coastal Carolina University Office of Graduate Studies admission requirements. In addition specialization areas will have an admissions committee who will review applications and make recommendations based on the following criteria:

- 1. Completion of a Coastal Carolina University application form.
- 2. An earned Master's Degree in education or related field.
- 3. A minimum overall cumulative grade point average of 3.0 (on a 4.0 scale) documented by official transcripts for all collegiate coursework.
- 4. Copies of official scores on Graduate Record Examination (GRE) or Miller Analogies Test (MAT) and Test of English as a Foreign Language (TOEFL) if applicable. A score of 300 with no less than 160 on the verbal and 140 on the quantitative Graduate Record Examination, or 400 on the Miller Analogies Test. Scores must be no more than five years old. If an applicant's Master's Degree with overall GPA is 3.5 or higher, request of copies of official scores on the Graduate Record Examination or the Miller Analogies Test is waived.
- 5. Applicants who are non-native speakers of English speakers must demonstrate proficiency in English and provide official results from tests taken within the last three years or one of the following acceptable means of documenting English language proficiency consistent with success in graduate programs. Note that higher scores may be required of some graduate programs so applicants are urged to consult their desired program to identify whether a higher score is required:
 - a. A minimum score of 550 on the paper-based (PBT) or 79 on the internet (iBT) Test of English as a Foreign Language (TOEFL)
 - b. A minimum score of 6.5 on the International English Language Testing System (IELTS) exam
 - c. Certificate of Completion of level 112 of English for Academic Purposes (EAP) from an ELS Language Center
 - d. Pearson Test of English (PTE) Academic with a score of 59
 - e. Cambridge Certificate of Advanced English (CAE) with a minimum level of C1:
 - f. Cambridge Certificate of Proficiency in English (CPE) with a minimum level of C1;
 - g. Michigan English Language Assessment Battery (MELAB) with a score of 77
 - h. Test of English for International Communication (TOEIC) with a score of 745
 - i. Bachelor's degree earned from a regionally accredited U.S. institution of higher education within the last three years.

- 6. Applicants will submit a written statement explaining how the Interdisciplinary Ph.D. will be instrumental in achieving specific career and research goals.
- 7. Submit three professional reference letters that specifically address the candidate's ability to successfully meet the demands of high level graduate coursework. One letter must be from their current immediate supervisor.
- 8. A face-to-face and/or virtual interview will be required that primarily focuses on the applicants written statement regarding career and research goals as well as the applicants vision for their personal and professional development and how this program may support their vision.
- 9. Applicants may be asked to complete an on-site writing sample.
- 10. Applicants entering the program with an Ed.S. degree in Educational Leadership from a regionally accredited institution may be awarded up to 21 credit hours for coursework completed prior to admission to this program (see required elements of the curriculum below). The program's Admission Committee will review the application materials submitted by each applicant to determine what graduate course credit may be applicable to the program's coursework requirements. Highly qualified applicants entering the program from a regionally accredited Ed.S. degree program may be provisionally accepted into the Ph.D. program through the general admission procedure outlined above.
- 11. An updated resume is required.

COLLEGE OF SCIENCE

1. Department of Computing Sciences

a. Santee Cooper Master of Science in Information Systems Technology with a Concentration in Security and Analytics (M.S.) (Form B – ID# 82)

Admission Requirements

- 1. Completion of a graduate degree application and payment of the application fee.
- 1. Submission of an official undergraduate transcript from each post-secondary school or college previously attended, including any graduate study previously undertaken.
- 2. Evidence of having received a baccalaureate degree from a regionally accredited institution in this country or its equivalent at a foreign institution based on a four-year degree with a cumulative GPA of 3.0.
- 3. Official GRE or GMAT scores. GRE or GMAT requirements may be waived if the student has one or more of the following:
 - a. Two years of full-time relevant, professional work experience in a computing/technology field or

- b. A 3.3 GPA or higher undergraduate GPA with an earned degree in computer science, information systems, information technology, cybersecurity, computer engineering or related degree.
- 5. International students whose native language is not English must provide official results from tests taken within the last three (3) years or one of the following acceptable means of documenting English language proficiency consistent with success in graduate programs. (Note: higher scores may be required of some graduate programs so applicants are urged to consult their desired program to identify whether a higher score is required):
 - a. A minimum score of 550 on the paper-based (PBT) or 79 on the internet (iBT) Test of English as a Foreign Language (TOEFL);
 - b. A minimum score of 6.5 on the International English Language Testing System (IELTS) exam;
 - c. Certificate of Completion of level 112 of English for Academic Purposes (EAP) from an ELS Language Center;
 - d. Pearson Test of English (PTE) Academic with a score of 59;
 - e. Cambridge (Certificate of Advanced English (CAE) with a minimum level of C1;
 - f. Cambridge Certificate of Proficiency in English (CPE) with a minimum level of C1;
 - g. Michigan English Language Assessment Battery (MELAB) with a score of 77;
 - h. Test of English for International Communication (TOEIC) with a score of 745:
 - 6. Bachelor's degree earned from a regionally accredited U.S. institution of higher education within the last three (3) years.
 - 7. Submission of at least two letters of recommendation from individuals familiar with the academic ability, level of responsibility, and work ethic of the applicant.

- 8. Submission of a resume.
- 9. Submission of a written statement of educational and career goals, how this degree will fulfill those goals and the subject area of research or career interest while completing this degree.
 - 10. Prerequisites required for admission are undergraduate credits in:
 - a) Computer Networks or Information Security (3 credit hours)
 - b) Programming or Web Development (3 credit hours)
 - c) Database Design or SQL Development (3 credit hours)
 - d) Statistics (3 credit hours)

Undergraduate course credit requirements may be waived depending on the relevant industry experience or completion of the professional certification by the applicant.

Admission decisions are made when all evidence of the applicant's ability to succeed in graduate studies has been submitted.

Provisional Admission

Applicants may receive provisional admission to the program if they do not meet the stated admission requirements and are entering the University for the first time or are returning to the University after an extended absence. Students who are admitted provisionally are limited to 12 credit hours of coursework toward the degree program.

Removal of Provisional Status

To remove provisional status, within the first two academic semesters (either Fall, Spring or Spring, Fall), the student must:

- 1. Earn a "B" or better in two core courses;
- 2. Maintain a 3.0 GPA in all graduate courses taken;
- 3. Earn a "B" or better in all undergraduate prerequisites required as specified in the provisional acceptance letter.

Degree Requirements

The Santee Cooper Master of Science in Information Systems Technology with a Concentration in Security and Analytics requires:

- 1. Successful completion of an approved program of study with a minimum of 33 graduate credit hours.
- 2. A minimum grade point average of 3.0 (B) on all coursework.
- 3. A maximum of two (2) classes may be completed below the grade of "B" before dismissal from the program.
- 4. If a student has chosen the thesis option, completion of successful defense through an oral presentation and written thesis report.
- 5. All work applied toward the degree must be earned in the six (6) years immediately preceding the completion of the graduate program.

Curriculum

The Santee Cooper Master of Science in Information Systems Technology with a Concentration in Security and Analytics program requires 33 graduate credit hours. As this degree seeks to provide a broad range of skills and experiences that are required for the students to be experts in the increasingly complex domains, information security and data analytics, the curriculum is divided into core coursework, elective coursework and a capstone experience. These core, elective, and capstone courses would ensure that the students apply state of the art concepts, policies, methods tools, and techniques for the problems, projects and case studies that closely resemble the real world and industry issues. Students must maintain a 3.0 GPA and may not have more than two grades of "C" in the program.

Degree Requirements (33 Graduate Credit Hours)

Core Courses (15 Credit Hours)

- IST 650 Information Systems Technology in Context (3 credits)
- IST 660 Introduction to Cybersecurity and Information Assurance (3 credits)
- IST 661 Security Policy and Risk Assessment (3 credits)
- CSCI 534 Digital Forensics and E-Discovery (3 credits)
- IST 670 Data Management and Analytics (3 credits)
- IST 671 Data Mining and Knowledge Discovery (3 credits)

Electives (12 Credit Hours: Aligned with Career Goals)

Choose two from the following:

- CSCI 534 Digital Forensics and E Discovery (3 credits)
- IST 661 Security Policy and Risk Assessment (3 credits)
- IST 664 Cloud Computing Security (3 credits)
- IST 665 Secure Networking (3 credits)
- IST 662 Secure Software Development (3 credits)

• IST 667 - Intelligence and Security Analysis (3 credits)

Choose two from the following:

- CSCI 575 Decision Support Systems (3 credits)
- IST 674 Machine Learning and Deep Learning (3 credits)
- IST 675 Semantic Web Technologies (3 credits)
- IST 676 Data Fusion)3 credit hours)
- IST 677 Data Visualization (3 credits)
- IST 678 Business Intelligence and Analytics (3 credits)

Capstone (6 Credit Hours)

• IST 799 - Thesis Research (1 to 6 credits)

OR

Choose two from the following:

- IST 659 Special Topics in Information Systems Technology (3 credits)
- IST 669 Special Topics in Information Security (3 credits)
- IST 679 Special Topics in Data Analytics (3 credits)

Graduate Council (moved and seconded in committee)

Proposal(s) for a new graduate course:

COLLEGE OF SCIENCE

1. Department of Biology

a. BIOL 566– Ecology of Fishes (Form C – ID# 307)

Proposed catalog description: BIOL 566 –Biology of Fishes (3 credits). Topics covered include: temperature relations, bioenergetics, niche, competition, predator-prey interactions, habitat use, foraging, assemblages, invasive species, and conservation. S.

Course Prefix/Number: BIOL 566 Course Title: Biology of Fishes

Primary Goal: The course will expand the number of graduate electives for CMWS

students.

Repeatable for Credit: No Course Equivalencies: No Prerequisite(s): None

2. Department of Computing Sciences

a. IST 664 – Cloud Computing Security (Form C – ID# 400)

Proposed catalog description: IST 664 - Cloud Computing Security (3 credits) (Prereq: Admission to the Master of Science in Information Systems Technology program or prior approval from the instructor) This course explores the fundamentals of cloud computing security and addresses the cloud security related vulnerabilities, risks, issues and challenges by exploring the security architectures, security features, cloud identity and access management, cloud software security and cloud networking security tools and techniques. F, S, Su.

Course Prefix/Number: IST 664

Course Title: Cloud Computing Security

Primary Goal: The course is an elective for the M.S. in Information Systems

Technology program

Repeatable for Credit: No **Course Equivalencies:** No

Prerequisite(s): Admission to the Master of Science in Information Systems

Technology program or prior approval from the instructor

Graduate Council (moved and seconded in committee)

Proposal(s) for change(s) in, restoration of, or removal of a graduate course

COLLEGE OF HUMANITES AND FINE ARTS

1. Department of History

a. MALS 600 – Core Seminar

Proposed revision(s): Course change (Form A – ID# 93)

Course Action(s): Change to prerequisite(s): **FROM:** Admission to MALS Program **TO:**

Permission of program coordinator and instructor

Proposed catalog description:

MALS 600 - Core Seminar (3 credits) (Prereq: permission of program coordinator or instructor) This introduction to interdisciplinary graduate study explores a broad topic through various disciplinary lenses. F, S, Su

b. MALS 650 – Graduate Research Methods

Proposed revision(s): Course change (Form A – ID# 94)

Course Action(s): Change to prerequisite(s): FROM: Admission to MALS Program TO: Permission of program coordinator or instructor; Change to corequisite(s): FROM: MALS 600 TO: None

Proposed catalog description:

MALS 650 - Graduate Research Methods (3 credits) (Prereq: permission of program coordinator or instructor) Course introduces students to the skills necessary to explore a range of topics suitable for study in the program. In addition to providing practice in locating and synthesizing information from a variety of academic resources, the course will also introduce students to other research methodologies, including both qualitative and quantitative, and to theoretical and conceptual issues associated with humanities and arts research. F, S, Su

c. MALS 699 – Independent Study

Proposed revision(s): Course change (Form A – ID# 95)

Course Action(s): Change to prerequisite(s): **FROM:** Admission to MALS Program and MALS 600 **TO:** Permission of program coordinator or instructor; Change to course

credit(s): **FROM:** 1-3 credits **TO:** 3 credits

Proposed catalog description:

MALS 699 - Independent Study (3 credits) (Prereq: permission of program coordinator and instructor) Guided by a faculty mentor, a student conducts an intense study of an issue salient to one's scholarly interests. This course may be repeated under different topics for up to 6 credit hours. F, S, Su

d. MALS 700 – Graduate Writing, Documentation and Presentation

Proposed revision(s): Course change (Form A – ID# 96)

Course Action(s): Change to prerequisite(s): FROM: Admission to MALS Program TO: Permission of program coordinator or instructor; Change to corequisite(s): FROM: MALS 600 TO: None

Proposed catalog description:

MALS 700 - Graduate Writing, Documentation and Presentation (3 credits) (Prereq: permission of program coordinator or instructor) Course allows students to hone composition and presentation skills necessary to complete a major project in their area of study. F, S, Su