# GRADUATE COUNCIL AGENDA MAY 16, 2024 1:00 PM

#### **110 GRINTER HALL**

#### I. <u>ACTION ITEMS:</u>

1. Minutes from the April 18, 2024, Graduate Council Meeting (Enclosure 1)

#### **CERTIFICATES:**

- 2. The College of Design, Construction and Planning seeks to create a graduate certificate in AI in Architecture (#19843). Dr. Karla Saldana Ochoa and Ms. Nancy Clark will be present for discussion. (Enclosure 2)
- **3.** The College of Design, Construction and Planning seeks to create a graduate certificate in Healthcare Design Integration (#19815). Dr. Stephen Bender will be present for discussion. (Enclosure 3)

#### **CONCENTRATIONS:**

- 4. The College of Dentistry seeks to add the project in lieu of thesis as an option to the concentrations in Periodontics and Operative and Esthetic Dentistry for the Master of Science (M.S.) degree with a major in Dental Sciences (#19757). Dr. Roberta Pileggi will be present for discussion. (Enclosure 4)
- 5. The College of Journalism and Communications seeks to modify the curriculum for the graduate concentration in Web Design and Online Communication for the Master of Arts in Mass Communication (M.A.M.C.) with a major in Mass Communication (#19778). Dr. Evan Kropp will be present for discussion. (Enclosure 5)
- 6. The College of Liberal Arts and Sciences seeks to close the concentration in Quantitative Finance for the Doctor of Philosophy (Ph.D.) with a major in Mathematics (#19561). (Enclosure 6)

#### **MAJOR MODIFICATION:**

 The College of Medicine seeks to reduce the amount of credit for the Master of Science (M.S.) with a major in Genetics and Genomics (#19840). Dr. Connie Mulligan will be present for discussion. (Enclosure 7)

#### **DEGREE:**

 The College of Public Health and Health Professions seeks to modify the curriculum for the Master of Health Administration (M.H.A.) (#19867). Dr. George Hack and Dr. Keith Benson will be present for discussion. (Enclosure 8)

#### **ONLINE MODALITIES:**

9. The Herbert Wertheim College of Engineering seeks to offer various levels of online modality for the following existing Ph.D. majors: Aerospace Engineering, Civil Engineering, Coastal and Oceanographic Engineering, Environmental Engineering Sciences, Materials Science and Engineering, Mechanical Engineering, and Nuclear Engineering Sciences (#19991). Dr. Denise Simmons will be present for discussion. (Enclosure 9)

# NOMINEES FOR GRADUATE CURRICULUM COMMITTEE:

10. Graduate Curriculum Committee Nominations. Dr. Tom Kelleher will be present for the discussion.

# II. INFORMATION ITEM / ADMINISTRATIVE ACTIONS:

- 11. Graduate Curriculum Committee April Minutes and May Agenda (Enclosure 10)
- 12. Update on the Graduate Council election 2024–2027
- 13. Graduate Programs Distance or Self-Supporting

Four MPH concentrations were added as self-supporting concentrations:

- Biostatistics
- Epidemiology
- Environmental Health
- Population Health Management
- 14. Graduate Student Success Center

# III. **DISCUSSION ITEMS**:

- 15. Propose extending the 2-term expiration on the final exam to 3 terms.
- 16. #<u>19698</u> MED Master of Science (M.S.) with a major in Artificial Intelligence in Biomedical and Health Sciences
- 17. June Meeting

# GRADUATE COUNCIL MINUTES April 18, 2024 1:00 PM

#### 110 GRINTER HALL Teleconference (Via Zoom)

MEMBERS PRESENT: Dr. Linda Bloom, Dr. James Essegbey, Dr. Hitomi Greenslet, Dr. Michael Martinez, Dr. Corene Matyas, Dr. Connie Mulligan, Dr. K. Ramesh Reddy, and Kevin Senior (GSC rep)

MEMBERS ABSENT: Dr. Nicole Stedman (Chair), Dr. J.C. Bunch, Dr. Kristin Larsen, Dr. Aner Sela, Dr. Joni Williams Splett, Dr. Marta Wayne, and Jasleen Kaur (GSC alternate)

GUESTS PRESENT: Nancy Clark (College of Design, Construction and Planning), Dr. Darragh Devine (College of Liberal Arts and Sciences), Dr. Jorge Hernandez (College of Veterinary Medicine), Dr. Maria Leite (Academic Affairs), Dr. Johnathan Orsini (Office of the Provost/Teaching and Technology), Dr. Janet Robishaw (College of Veterinary Medicine), Dr. Tobin Shorey (Undergraduate Curriculum Committee), Dr. Cyntrice Thomas (College of Health and Human Performance), and Ashley Tidwell (Office of Admissions)

STAFF PRESENT: Dr. Tom Kelleher, Megan Lewis, Dr. Talline Martins, Hannah Potter, Frankie Tai (Recording), Patty Van Wert, and Stacy Wallace

The meeting was called to order at 1:01 p.m.

Dr. Kelleher welcomed everyone to this month's meeting of the Graduate Council and gave a brief summary of the pending proposals to be presented to the Council. (Prior to calling the meeting to order, Dr. Kelleher informed everyone that today's Zoom meeting was being recorded.)

# I. <u>ACTION ITEMS:</u>

1. Minutes from the March 21, 2024, Graduate Council Meeting. A motion to approve was made, seconded, and passed unanimously.

#### **CONCENTRATIONS:**

- 2. The College of Liberal Arts and Sciences seeks to participate in the existing interdisciplinary concentration in Clinical and Translational Science for the Doctor of Philosophy (Ph.D.) with a major in Psychology (#19548). Dr. Darragh Devine was present for discussion. A motion to approve was made, seconded, and passed unanimously, with a proposed effective date of summer 2024.
- **3.** The College of Health and Human Performance seeks to modify the curriculum for the concentration in Sport Management for the Doctor of Philosophy (Ph.D.) with a major in Health and Human Performance (#19618). Dr. Cyntrice Thomas was present (via Zoom) for discussion. A motion to approve was made, seconded, and passed unanimously, with a proposed effective date of earliest available.

#### **DEGREE:**

4. The College of Veterinary Medicine seeks to create a new degree in Comparative Biomedical Sciences for the Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) (#18414). Dr. Jorge Hernandez and Dr. Janet Robishaw were present for discussion. Dr. Hernandez shared a PowerPoint presentation detailing the

plans behind the degree proposals. A motion to approve was made, seconded, and passed unanimously, with a proposed effective date of fall 2024.

# **CERTIFICATE POLICY:**

5. Certificate policy – In cases in which a program offers a graduate program (e.g., master's) and graduate certificate of the same name, students who withdraw from the master's program may be awarded the certificate with the same name if they have already completed all the required courses and the department approves. Dr. Tom Kelleher was present for discussion. A motion to approve was made, seconded, and passed unanimously.

# II. INFORMATION ITEM / ADMINISTRATIVE ACTIONS:

- 6. Graduate Curriculum Committee March Minutes and April Agenda (Enclosure 6).
- 7. The College of Design, Construction and Planning seeks to modify the curriculum for the Master of Integrated Sustainable Development (M.I.S.D.) degree with a major in Integrated Sustainable Development (#19662). The proposal was administratively approved with a proposed effective date of fall 2024.
- Update on the Graduate Council election 2024-2027 The Graduate School has selected Dr. Abdoulaye Kane and Dr. Pilar Useche based on results of the Graduate Faculty election. The provost's office will select the other two members.
- Graduate Programs Distance or Self-Supporting (No new items) Dr. Orsini shared that a few concentration proposals were recently approved, and they will be included on the agenda for the next meeting.
- Graduate Student Success Center Dr. Talline Martins shared the new changes in roles for the employees of the center.

The meeting adjourned at 1:38 p.m.

#### Certificate | New for request 19843

Info

Request: New Graduate Certificate for AI in Architecture Description of request: The College of Design, Construction, and Planning seeks to create a new graduate certificate in AI in Architecture. Submitter: Karla Saldana Ochoa ksaldanaochoa@ufl.edu Created: 5/5/2024 4:33:05 PM Form version: 5

Responses Certificate Name

Enter the name of the certificate. Example: Urban Pest Management.

Al in Architecture

#### **Transcript Title**

Enter the transcript title of the certificate. This is limited to 50 characters, including spaces.

AI in Architecture

#### Credits

Enter the total number of credit hours needed to complete the certificate program.

15 credits

#### Level

Enter the program level of the certificate.

#### Graduate

#### CIP Code

Enter the six digit Classification of Instructional Programs (CIP) code for the degree program associated with the proposed certificate. The code has the numerical format XX.XXXX. Contact the <u>Office of Institutional Planning and Research</u> (OIPR) to verify the CIP code for the existing degree program.

04.0201

#### Degree Program

Enter the degree program associated with the CIP code entered above (e.g. Accounting).

Architecture

#### **Effective Term**

Enter the term (semester and year) that the certificate would start. Please keep in mind that this may be adjusted depending on University deadlines for approval process.

Earliest Available

#### **Effective Year**

2024

#### **Certificate Description**

Enter a description of the certificate. This is limited to 50 words or fewer.

The AI in Architecture Graduate Certificate provides a structured curriculum focusing on coding, computation, and theoretical/practical AI applications in architecture. It ensures students gain a competitive edge in the job market through comprehensive AI education, bridging the skills gap and preparing them for success in this dynamic field.

#### **Requirements for Admission**

List any requirements for admission to this new certificate program such as grade point average, background in the discipline, current enrollment status, etc.. Please indicate if the certificate only accepts students of a particular status: for example, current UF graduate students, graduate students in a specific college, non-degree seeking students, or any student status.

• Applicants to this graduate certificate must have earned a bachelor's degree from an accredited US institution or international equivalent in Architecture, Arts, Computer & Information Science & Engineering, Electrical & Computer Engineering, or related fields. or

Current UF graduate students in Architecture, Arts, Computer & Information Science & Engineering, Electrical & Computer Engineering, or related fields are eligible. or

Working professionals in Architecture, Arts, Computer & Information Science & Engineering, Electrical & Computer Engineering, or related fields may apply.

• Applicants must have obtained a bachelor's degree or better and a minimum upperdivision GPA of 3.0 from a regionally accredited institution or an international equivalent institution. Students may pursue just the graduate certificate without applying as master's degree-seeking students within the graduate program. These courses may not be applied to another certificate program (per UF policy).

#### **Requirements for Completion**

List all of requirements for completion of the certificate program, such as courses, internships, projects, etc. For each course, indicate prefix, number, title, # credits, and established grading scheme (letter grade or S/U). The title should be identical to the official title of the course as listed in the <u>Graduate</u> catalog.

Consistent with longstanding Graduate Council policy, the only passing grades for students in a Graduate Certificate program are A, A-, B+, B, B-, C+, C, and S. All coursework for the Graduate Certificate must meet a minimum overall 3.0 GPA

(truncated). Coursework and credits used for a UF Graduate Certificate may also be used to fulfill some requirements for a UF graduate degree, subject to existing Graduate School policy and with the approval of the academic unit offering the graduate degree program. Students will be made aware that only 15 credits taken in the certificate program may potentially be transferred toward a master's degree. As such, they will be strongly encouraged to apply to the master's program before their final semester in the certificate. Otherwise, they will be required to take an additional course in the master's program to fulfill the graduation requirement.

Following traditional Transfer of Credit policy and procedures, up to 6 credits earned with a grade of B or better may be considered for transfer credit toward a future graduate degree provided.

The graduate AI in Architecture Certificate requires 15 credit hours to complete.

Nine credits are required from the following ARC courses: ARC 5XXX – Fundamentals of Coding and Computation – Spring – 3 credits (Approval #19922) ARC 6XXX – Clock and Clouds - Fall and Spring – 3 credits (Approval #19816) ARC 6XXX – Machine Learning for Architects – Fall – 3 credits (Approval #19827)

Students can take the remaining 6 credits from any of the following clusters:

Architecture Cluster

ARC 6356 –Advanced Studio III- Fall G3 – 6 credits ARC 6979 –Master's Research Project– Spring – 6 credits ARC 6971 – Thesis AI – Spring – 6 credits

Urban Planning Cluster URP 6271 – Automation for Geospatial Modeling and Analysis Fall – 3 credits URP 6272 – Urban Spatial Analysis Fall – 3 credits URP 6276 – Internet Geographic Information Systems Fall – 3 credits

Data Science Cluster CAP 5771 – Introduction to Data Science - Fall – 3 credits COT 5405 – Analysis of Algorithms - Spring – 3 credits COP 5536 – Advanced Data Structures - Spring – 3 credits

Artificial Intelligent Cluster EEL 5840 – Fundamentals of Machine Intelligence - Spring – 3 credits

#### Rationale and Place in Curriculum

Describe the rationale for offering this new certificate and having it on the transcript, its place in the curriculum, how it will enhance the quality of the existing program or department. Also describe its overlap with any existing certificates and programs, and a justification for any such overlap. Note that documentation of consultation will be expected for any certificate with overlapping content. As technology continues to drive the advancement of the built environment, students in the field of architecture could significantly benefit from a strong foundation in AI and its applications. The School of Architecture is committed to providing its students with the skills and knowledge they need to excel academically and in their future careers. Our goal with the AI certificate is to provide graduate students with the opportunity to earn a certificate specializing in AI and Machine Learning applied to the field of Architecture to equip them with the tools they need to succeed in this rapidly evolving field.

#### Student Learning Outcomes

List each student learning outcome with its associated courses, assessment type (e.g. courserelated exam/assignment/grade, final paper/project/presentation, standardized exam, capstone) and method (e.g. rubric, faculty committee, single faculty member).

The AI Certificate developed 4 new classes at the School of Architecture to cover subjects ranging from Theory to Practice. The courses meet the requirements identified by the university AI Task Force, with measurable goals and outcomes for future assessment: AI Enrichment, AI Ethics, Use & Apply AI, Evaluate & Create AI. The Student Learning Outcomes are met using the 9 credit hours, 3 of the new courses' coursework.

#### ARC 5XXX – Fundamentals of Coding and Computation – 3 credits

This course will teach the fundamentals of coding and computation. During the course, students will understand concepts such as variables, conditions, loops, algorithms, and libraries. The students will then implement these concepts in design exercises to create hands-on projects using coding to solve design problems. (R, A) ARC 6XXX – Machine Learning for Architects – add assignment type and assessment.

#### ARC 6XXX – Clock and Clouds – 3 credits

This course will examine the limitations and opportunities of Bias and Fairness in the practice of architecture using AI. This course fulfills university requirements to be categorized as "AI Ethics." Students will construct theoretical and philosophical questions related to AI and data-driven algorithms in design and will examine bibliographic works to support their hypotheses in response to the questions. In their final project, students will create course syllabi for the first year of architecture studies, taking AI as a ground infrastructure in the curriculum.

#### ARC 6XXX – Machine Learning for Architects - 3 credits

This course will focus on experimentation and application. Students will apply the most common state-of-the-art AI and Machine Learning (ML) algorithms and game engines in architectural design. Emphasizing AI as a paradigm for critical thinking and idea development, not just optimization. This course will fulfill university requirements to be categorized as "Use & Apply AI. The remaining 6 credits add additional reinforcement within a range range of outcomes.

#### ARC 6356 Advanced Studio III - 6 credits

This design studio course is fundamental to architectural education. Students will combine different AI algorithms to create solutions for real-world design projects. This course will fulfill university requirements to be categorized as "Use & Apply AI."

PILOT projects or the Final Thesis: Students can develop research projects utilizing AI applications for their PILOT or Thesis. The credits can be counted towards the AI and Architecture Certificate if the projects include a section utilizing AI. This course fulfills university requirements to be categorized as "Use & Apply AI."

To ensure a well-rounded curriculum, other courses will be outsourced from other schools within the University of Florida (UF), such as the College of Arts, and the College of Engineering. These courses will delve into the specific application of AI in different areas, such as engineering, data science, fabrication, building performance, theater, art, music, etc. These courses will fulfill the "Evaluate & Create AI" category requirements.

Outcome Map Key:

- I = Introduced
- E = Emphasized R = Reinforced A = Advanced

Students solve design problems by applying code (AI Enrichment). (I, E) ARC 5XXX – Fundamentals of Coding and Computation.

Students critically evaluate theoretical and philosophical questions in (design) architectural practices raised by AI and data-driven algorithms (AI Ethics). (I, E) ARC 6XXX – Clock and Clouds. (R, A) ARC 6XXX – Machine Learning for Architects.

Students devise approaches to solve architectural design problems by applying state-ofthe-art AI and Machine Learning (ML) algorithms (Use & Apply AI).

ARC 5XXX – Fundamentals of Coding and Computation (E, R)

ARC 6XXX – Machine Learning for Architects

Students propose and design AI research methods to approach viable architectural design questions (Evaluate & Create AI).

ARC 5XXX – Fundamentals of Coding and Computation

(E) ARC 6XXX – Clock and Clouds

(R, A) ARC 6XXX – Machine Learning for Architects

#### Certificate | New for request 19815

Info

Request: Graduate Certificate in Healthcare Design Integration Description of request: The College of Design, Construction and Planning seeks to create a graduate certificate in Healthcare Design Integration Submitter: Stephen Bender sbender@ufl.edu Created: 5/3/2024 5:20:17 PM Form version: 4

Responses

Certificate Name

Enter the name of the certificate. Example: Urban Pest Management.

Healthcare Design Integration

#### Transcript Title

Enter the transcript title of the certificate. This is limited to 50 characters, including spaces.

Healthcare Design Integration

#### Credits

Enter the total number of credit hours needed to complete the certificate program.

19

**Level** *Enter the program level of the certificate.* 

Graduate

#### CIP Code

Enter the six digit Classification of Instructional Programs (CIP) code for the degree program associated with the proposed certificate. The code has the numerical format XX.XXXX. Contact the <u>Office of Institutional Planning and Research</u> (OIPR) to verify the CIP code for the existing degree program.

04.0201

#### Degree Program

Enter the degree program associated with the CIP code entered above (e.g. Accounting).

Architecture

#### **Effective Term**

Enter the term (semester and year) that the certificate would start. Please keep in mind that this may be adjusted depending on University deadlines for approval process.

Fall

#### **Effective Year**

Earliest Available

#### **Certificate Description**

Enter a description of the certificate. This is limited to 50 words or fewer.

Healthcare Design Integration offers students a credential toward a career in healthcare environment design. The certificate requires a minimum of 19 credits. Students with previous degrees in architecture, landscape architecture, interior design, construction, engineering, health professions, health sciences, will gain specialized knowledge in collaborative evidence-based design for healthcare environments.

#### **Requirements for Admission**

List any requirements for admission to this new certificate program such as grade point average, background in the discipline, current enrollment status, etc.. Please indicate if the certificate only accepts students of a particular status: for example, current UF graduate students, graduate students in a specific college, non-degree seeking students, or any student status.

Applicants must have earned a baccalaureate degree from a regionally accredited institution or an international equivalent. Applicants must also have earned a minimum 3.0 GPA for last 60 hours of baccalaureate degree.

#### **Requirements for Completion**

List all of requirements for completion of the certificate program, such as courses, internships, projects, etc. For each course, indicate prefix, number, title, # credits, and established grading scheme (letter graded, and/or S/U). The title should be identical to the official title of the course as listed in the Graduate Catalog at <u>http://gradcatalog.ufl.edu</u>.

Healthcare Design Integration Certificate Required Courses: ARC 5xxx Introduction to Healthcare Design (3 credits, letter-graded) (Approval #19918) ARC 5043 Integration Practices for Built Environments (3 credits, letter-graded) ARC 6242 Research Methods (3 credits, letter-graded) ARC 6xxx Planning and Design for Healthcare Environments (3 credits, letter-graded) (Approval #19809) ARC 6xxx Healthcare Design Practice (3 credits, letter-graded) (Approval #19810) ARC 6xxx Co-Design Lab for Healthcare Environments (4 credits, letter-graded) (Approval #19813)

#### Rationale and Place in Curriculum

Describe the rationale for offering this new certificate and having it on the transcript, its place in the curriculum, how it will enhance the quality of the existing program or department. Also describe its overlap with any existing certificates and programs, and a justification for any such overlap. Note that documentation of consultation will be expected for any certificate with overlapping content.

The certificate curriculum is the result of University and healthcare design industry collaboration. Instruction will include lectures, workshops, design projects, and informal conversations among students and leading healthcare design professionals that ensure content relevance and an understanding of prevailing and cutting-edge practices in the industry. The certificate aims to fill a gap identified by the healthcare design industry, which seeks interdisciplinary team members to imagine, plan, and evaluate future healthcare environments utilizing evidence-based methods. It will attract interdisciplinary experts, faculty, and students to the School of Architecture. Graduates of this program are team leaders who will draw methodically from knowledge of the history, developments, current practice, and innovations in healthcare environments to propose evidence-based and assessable designs to meet goals and improve outcomes – and add new knowledge. In addition, upon completion of the certificate, students will be prepared to take the Center for Health Design, Evidence-Based Design Certification (EDAC) exam.

Students enrolled in the Master of Architecture (MArch) may add the Graduate Certificate in Healthcare Design Integration (HDI). This creates the track MArch+HDI. The certificate shares 15 credit hours with the Master of Architecture degree. It adds 4 credit hours and one semester to a Track One (Advanced Program, 52-credit) Master of Architecture Degree. The Graduate Certificate in Healthcare Design Integration when stacked with the MArch degree requires that the Thesis or PILOT required for the MArch degree be focused on a healthcare topic.

#### **Student Learning Outcomes**

List each student learning outcome with its associated courses, assessment type (e.g. courserelated exam/assignment/grade, final paper/project/presentation, standardized exam, capstone) and method (e.g. rubric, faculty committee, single faculty member).

Outcome Map Key: I = Introduced E = Emphasized R = Reinforced A = Advanced

Students summarize the history, developments, current practice, and innovations in healthcare environments.

(I) ARC 5xxx Introduction to Healthcare Design – quizzes - rubric

(E) ARC 6xxx Planning and Design for Healthcare Environments – quizzes - rubric

(R) ARC 6xxx Healthcare Design Practice – quizzes - rubric

Students appraise the role of designers and healthcare planning within the complexity of healthcare environments.

(I) ARC 5xxx Introduction to Healthcare Design - analytical notes - assessment, single faculty member

(R) ARC 6xxx Healthcare Design Practice - analytical notes - assessment, single faculty member

Students interpret and classify fundamental programmatic elements and critical relationships in healthcare facility planning and design.

(I) ARC 5xxx Introduction to Healthcare Design - Case Studies- assessment, single faculty member

(R) ARC 6xxx Planning and Design for Healthcare Environments – Evidence-based Design Workshops - assessment, single faculty member

(A) ARC 6xxx Healthcare Design Practice - Case Study Projects – assessment, expert committee

Students identify the relationships of healthcare organizations and attribute their impact to healthcare design practice.

(I) ARC 5xxx Introduction to Healthcare Design - Case Studies- assessment, single faculty member

(A) ARC 6xxx Healthcare Design Practice - Case Study Projects – assessment, expert committee

Students judge the application of research in practice and its impact on the evolution of healthcare environments.

(I) ARC 5xxx Introduction to Healthcare Design - Focus Papers - assessment, single faculty member

(A) ARC 6xxx Healthcare Design Practice - Case Study Projects – assessment, expert committee

Students analyze healthcare facility cases based on the paradigm of evidence-based design.

(I) ARC 5xxx Introduction to Healthcare Design - Focus Papers - assessment, single faculty member

(E, R) ARC 6242: Research Methods – Literature Review - assessment, single faculty member

(A) ARC 6xxx Planning and Design for Healthcare Environments – Evidence-based Design Workshops - assessment, single faculty member

Students organize in teams to develop (observe, study, ideate, prototype, test, iterate) evidence- based designs.

(I, E, R) ARC5993 Integration Practices for the Built Environment – Collaborative Final Project – assessment, single faculty member, peer evaluation

(E, R) ARC 6xxx Planning and Design for Healthcare Environments - Evidence-based Design Workshops - assessment, single faculty member

(E, R) ARC 6xxx Healthcare Design Practice - Case Study Projects (group work)-

assessment, single faculty member, peer evaluation

(A) ARC6xxx Co-design Lab for Healthcare Environments – Interim and Final Projects (group work) – assessment, single faculty member, peer evaluation

Students ideate, formulate, and develop designs using evidence that can be evaluated by experts.

(I) ARC 6242: Research Methods – Weekly assignments - assessment, single faculty member

(E) ARC 6xxx Planning and Design for Healthcare Environments - Evidence-based Design Workshops - assessment, single faculty member

(R) ARC 6xxx Healthcare Design Practice - Case Study Projects – assessment, expert committee

(A) ARC6xxx Co-design Lab for Healthcare Environments - Interim and Final Projects (group work) – assessment, expert committee

#### Concentration | Modify for request 19757

#### Info

Request: Add PILOT option to the concentrations in Periodontics and Operative and Esthetic Dentistry for the Master of Science (M.S.) degree with a major in Dental Sciences Description of request: The College of Dentistry seeks to add the project in lieu of thesis as an option to the concentrations in Periodontics and Operative and Esthetic Dentistry for the Master of Science (M.S.) degree with a major in Dental Sciences Submitter: Tammy Lee tlee@dental.ufl.edu Created: 5/7/2024 10:54:21 AM Form version: 3

# Responses

**Degree Level** Indicate the degree level in which the concentration is offered.

M - Master's Degree

#### Thesis or Non-Thesis

Is this concentration for a thesis or non-thesis degree?

Thesis

#### Concentration

Enter the name of the concentration to be modified.

(1) Periodontics and (2) Operative and Esthetic Dentistry

#### **Effective Term**

Enter the term (semester and year) at which the modification should be effective.

Fall

#### **Effective Year**

2024

#### Is this an undergraduate Innovation Academy Program

No

#### Department/Degree/Majors to Offer Concentration

*List all the department / degree / major combinations at the degree level offering the concentration.* 

College of Dentistry: Master of Science (M.S.) with a major in Dental Sciences and a concentration in Periodontics

College of Dentistry: Master of Science (M.S.) with a major in Dental Sciences and a concentration in Operative and Esthetic Dentistry

For example, if you are requesting a change to the "Wetland Sciences" concentration at the master's level, you would need to list all master's level degree / major combinations from every participating department:

- Forest Resources and Conservation: M.S. in Fisheries and Aquatic Sciences
- Forest Resources and Conservation: M.S. in Forest Resources and Conservation
- Forest Resources and Conservation: M.F.A.S. in Fisheries and Aquatic Sciences
- Forest Resources and Conservation: M.F.R.C. in Forest Resources and Conservation
- Geography: M.A in Geography
- Geography: M.S. in Geography
- Geological Sciences: M.S. in Geology
- Geological Sciences: M.S.T. in Geology

#### Current Curriculum for Concentration

The courses required in the current M.S. degree with the thesis option provide students with the necessary foundation for the program. Graduate credit hours will remain at 92. The names of the degrees, majors, and concentrations remain the same, as do the Student Learning Outcomes (SLOs).

#### **Proposed Concentration Changes**

Describe the proposed changes to the concentration. If requesting a name change please provide details here as well.

In addition to the thesis option that is already available to students in these programs, the college is proposing that the concentrations in Periodontics and Operative and Esthetic Dentistry, also have the option to complete a Project in Lieu of Thesis (PILOT).

There are no updates to the amount of credit, names, or the Student Learning Outcomes (SLOs) for the programs. The only observable update to the curriculum will be the students registering for DEN 6973, the Project in Lieu of Thesis course, instead of DEN 6971, the course for Master's Research. All of the other courses will remain the same within the students' curriculum, as well as the number of credits for the entire program. DEN 6973 is already an active course for other programs within the college. Instead of submitting their master's thesis to the Graduate School, students completing the project option must submit their study of research to the journal in the field.

#### Pedagical Rationale/Justification

Describe the rationale for the proposed changes to the concentration.

One essential aspect of the master's degree program is ensuring our graduate students submit a manuscript of their master's research project to peer-reviewed journals in our field. Having a manuscript submitted and published in a journal will afford the university and the student greater visibility and recognition on a national and international level. With the nation, most programs of our stature have already modified their programs to allow for a project in lieu of thesis rather than a thesis be required to meet graduate school academic requirements for a research degree.

#### Impacts on other programs

Describe any potential impact on other programs or departments, including increased need for general education or common prerequisite courses, or increased need for required or elective courses outside of the existing program.

None

#### Assessment Data Review

Describe the Student Learning Outcomes and/or program goal data that was reviewed to support the proposed changes.

There are no necessitated revisions to the Student Learning Outcomes (SLOs) for the programs. The projects will allow the students to integrate applied research into their graduate education.

Similar to the thesis option, students participating in the project in lieu of thesis option will follow the direction of their supervisory committees for guidance with their project. They must establish their committee as soon as possible, but no later than the second semester of enrollment. The committee must consist of at least 3 members of the graduate faculty. To satisfy the research component of the degree, the students will be required to conduct any necessary preliminary research, complete a literature review, and complete a protocol before further work on the project can continue.

Similar to the thesis oral defense, upon completion, the student will present the results of the project to the supervisory committee and any others who wish to attend the presentation. The student will defend the project with the supervisory committee and submit a final manuscript suitable for publication in a peer-reviewed journal. All committee members must agree and sign off on the final examination form stating that the project has met all requirements for the degree and that the oral examination has been passed. The student will be required to submit the final project to the Office of the Associate Dean for Advanced and Graduate Education in the College of Dentistry.

#### Academic Learning Compact and Academic Assessment Plan

Describe the modifications to the Academic Assessment Plan that result from the proposed change.

N/A

#### **Catalog Copy**

Submitter agrees to prepare and upload document showing the catalog copy with the current and proposed curricula edited using the "track changes" feature in Word.

No

#### Concentration | Modify for request 19778

Info

**Request:** Modify the curriculum for the M.A.M.C. concentration in Web Design and Online Communication

Description of request: The College of Journalism and Communications seeks to modify the curriculum for the graduate concentration in Web Design and Online Communication for the Master of Arts in Mass Communication (M.A.M.C.) with a major in Mass Communication. Submitter: Cheryl Oberlin coberlin@ufl.edu Created: 4/26/2024 2:53:23 PM Form version: 2

# Responses

**Degree Level** Indicate the degree level in which the concentration is offered.

M - Master's Degree

#### Thesis or Non-Thesis

Is this concentration for a thesis or non-thesis degree?

Non-Thesis

#### Concentration

Enter the name of the concentration to be modified.

Web Design and Online Communication

#### **Effective Term**

Enter the term (semester and year) at which the modification should be effective.

Spring

#### **Effective Year**

2025

#### Is this an undergraduate Innovation Academy Program

No

#### Department/Degree/Majors to Offer Concentration

*List all the department / degree / major combinations at the degree level offering the concentration.* 

Journalism and Communications/Master of Arts in Mass Communication/Mass Communication

For example, if you are requesting a change to the "Wetland Sciences" concentration at the master's level, you would need to list all master's level degree / major combinations from every participating department:

- Forest Resources and Conservation: M.S. in Fisheries and Aquatic Sciences
- Forest Resources and Conservation: M.S. in Forest Resources and Conservation
- Forest Resources and Conservation: M.F.A.S. in Fisheries and Aquatic Sciences
- Forest Resources and Conservation: M.F.R.C. in Forest Resources and Conservation
- Geography: M.A in Geography
- Geography: M.S. in Geography
- Geological Sciences: M.S. in Geology
- Geological Sciences: M.S.T. in Geology

#### Current Curriculum for Concentration

A. Design Core 13 Credits Required VIC5006 Foundations of Design for Communicators, 3 credits, Letter-graded VIC5315 Corporate and Brand Identity on the Web, 3 credits, Letter-graded VIC5325 Digital Imagery in Web Design, 4 credits, Letter-graded VIC5326 Digital Media Layout and Design, 3 credits, Letter-graded

B. Programming Core, 15 Credits Required

MMC5277 Web Design Principles, 4 credits, Letter-graded COM6338 Advanced Web Topics 1: Advanced Design, 4 credits, Letter-graded MMC6278 Advanced Web Topics 2, 4 credits, Letter-graded MMC6145 Web Interactivity and Engagement, 3 credits, Letter-graded

C. MAMC Core 6 Credits Required MMC5279 UX Design Theory, 3 credits, Letter-graded MMC6400 Mass Communication Theory, 3 credits, Letter-graded

D. Capstone Project 3 Credits Required MMC6950 Mass Communication Capstone, 3 credits, Letter-graded

Total 37 credits required

#### **Proposed Concentration Changes**

Describe the proposed changes to the concentration. If requesting a name change please provide details here as well.

A. Design Core 13 Credits Required

VIC5006 Foundations of Design for Communicators, 3 credits, Letter-graded VIC5315 Corporate and Brand Identity on the Web, 3 credits, Letter-graded VIC5325 Digital Imagery in Web Design, 4 credits, Letter-graded VIC5326 Digital Media Layout and Design, 3 credits, Letter-graded B. Programming Core 8 Credits Required
MMC5277 Web Design Principles, 4 credits, Letter-graded
COM6338 Advanced Web Topics 1: Advanced Design, 4 credits, Letter-graded

C. MAMC Core 6 Credits Required MMC5279 UX Design Theory, 3 credits, Letter-graded MMC6400 Mass Communication Theory, 3 credits, Letter-graded

D. General Electives 6 Credits Required

E. Capstone: 3 Credits Required MMC6950 Mass Communication Capstone, 3 credits, Letter-graded

Total Credits Required 36

#### Pedagical Rationale/Justification

Describe the rationale for the proposed changes to the concentration.

• The current WDOC degree plan includes a Design Core, Programming Core, MAMC Core, and Capstone for a total of 37 credits (See attached degree plan).

• In 2020, we completed a program review and determined that the 4 courses in the programming core had become severely outdated.

• Between 2020 and 2022, we updated each of the 4 programming classes to meet current employer needs and include the most used programming languages.

• Since updating the content of those courses, students have struggled with the Programming Core. This has resulted in many cases of plagiarism and cheating. A fair number of students have also dropped out of the program or switched concentrations. We see these challenges continuing in the future unless we make a change.

• It has become apparent that the students we attract are more interested in the design courses than the programming courses. This could also be because the program title includes "design" and not "programming." While the existing program is intended to create a well-rounded graduate who understands both front-end and back-end development, the two career roles are so different that we find people choose to pursue one or the other.

• We believe the current strategy of including both design and advanced programming content isn't the best way to serve students. They are not interested in anything beyond basic programming knowledge (html, .css, javascript).

• We are proposing a degree plan change.

• The change we propose is removing Advanced Web Topics 2 and Advanced Web Topics 3. We will keep the Web Design Principles and Advanced Web Topics 1 courses as those are more related to design programming than back-end programming like Web 2 and Web 3.

• To fill the empty 2-course slots, we propose including 2 elective course opportunities. This would be more in line with our other concentrations, which all have elective opportunities, and the current WDOC program does not offer any electives.

• Both electives will be 3 credit classes. This will change the total required credits from 37 to 36. All other concentrations are already at 36 credits.

• Copies of the current and proposed degree plans are attached for your review/comparison.

#### Impacts on other programs

Describe any potential impact on other programs or departments, including increased need for general education or common prerequisite courses, or increased need for required or elective courses outside of the existing program.

Students taking the current program major will not be affected as proposed changes will go into effect in Spring 2025.

#### Assessment Data Review

Describe the Student Learning Outcomes and/or program goal data that was reviewed to support the proposed changes.

SLO 1 - Identify, describe, explain and apply communication theory research methods, aiding in a synthesized perspective for evaluating and addressing professional or theoretical problems.

SLO2 - Address communication subject matter and issues through application, analysis, or synthesis of subjects, theories, and methodologies.

SLO3 - Display ethical behaviors, teamwork, cultural sensitivity/appreciation for diverse viewpoints, and meet professional standards for effective and ethical decision-making.

#### Academic Learning Compact and Academic Assessment Plan

Describe the modifications to the Academic Assessment Plan that result from the proposed change.

We will continue to assess student understanding, methods, expertise, and synthesis. Further, we will continue to assess student knowledge, skills, and professional behavior. There will be no changes to the academic learning impact or assessment plan. It will, however, provide additional opportunities for assessment due to the proposed change of adding elective courses. All students completing the program will create a capstone project addressing issues in the communication field that demonstrates a synthesis of knowledge gained from the program.

#### **Catalog Copy**

Submitter agrees to prepare and upload document showing the catalog copy with the current and proposed curricula edited using the "track changes" feature in Word.

Yes

#### Concentration | Close for request 19561

#### Info

**Request:** Close the graduate concentration in Quantitative Finance for the Ph.D. with a major in Mathematics

**Description of request:** The College of Liberal Arts and Sciences seeks to close the concentration in Quantitative Finance for the Doctor of Philosophy (Ph.D.) with a major in Mathematics. **Submitter:** Michael Jury mjury@ufl.edu

Created: 5/2/2024 1:36:14 AM Form version: 3

# Responses

#### **Proposed Action**

*Indicate whether the proposed action is to fully close (terminate) a concentration or to cease participation in a concentration.* 

Close a Concentration

• Select to close the concentration if the requesting academic unit is the sole participant in the concentration or if all participating academic units in an inter-disciplinary concentration want to close the concentration. In this latter case, documentation of consent from all participating academic units must be included in the request.

• Select to cease participation in a concentration if the requesting academic unit is part of an inter-disciplinary concentration with other academic units and wishes to remove only its portion of the concentration, or if you the requesting academic unit expects the concentration to continue being offered in another degree program.

#### **Degree Level**

Indicate the degree level from which to remove the concentration.

D - Doctoral Degree

#### Concentration

Enter the name of the concentration to be closed.

Quantitative Finance (MAT\_PHD01)

#### **Termination Date**

*Enter the termination date (semester/year), which is the last date students will be accepted into the program.* 

Summer 2024

#### Phase-Out Date

Enter the phase-out date (semester/year), which is when the last student in teach-out will have completed the major. This date should allow time for enrolled students to complete the

major in a reasonable amount of time. The phase-out date is the last date that data will be submitted for the major.

Summer 2024

#### Department/Degree/Majors Closing the Concentration

*List the department / degree / major combinations at the degree level chosen at which to close this concentration.* 

Mathematics: PhD in Mathematics

For example, to request closure of the "Wetland Sciences" concentration at the master's level, list all master's level degree / major combinations from all departments participating in the concentration:

- Forest Resources and Conservation: M.S. in Fisheries and Aquatic Sciences
- Forest Resources and Conservation: M.S. in Forest Resources and Conservation
- Forest Resources and Conservation: M.F.A.S. in Fisheries and Aquatic Sciences
- Forest Resources and Conservation: M.F.R.C. in Forest Resources and Conservation
- Geography: M.A in Geography
- Geography: M.S. in Geography
- Geological Sciences: M.S. in Geology
- Geological Sciences: M.S.T. in Geology

#### **Rationale for Closure**

Describe the rationale for the request to close the concentration.

There are currently no active students or faculty associated with the concentration; additionally, none are anticipated in the future.

#### Impact on Other Programs

Describe the potential impact that closing the concentration may have on other programs.

none

#### Steps Taken to Inform Students and Faculty

State what steps have been taken to inform students and faculty of the intent to close the concentration.

Department webpages will be updated to reflect this closure.

#### Teach-Out Plan

*Explain how students in the major will be able to complete their degree. The teach-out process often extends well beyond the termination date.* 

There are currently no students pursuing this concentration.

#### Accommodation of Faculty

Provide an explanation of the manner in which the Department and College intend to accommodate faculty who are currently active in the concentration.

There are currently no active faculty associated with this concentration.

### Degree | Change\_Credits for request 19840

#### Info

Request: Reduce the amount of credit for the M.S. degree in Genetics and Genomics Description of request: The College of Medicine seeks to reduce the amount of credit for the Master of Science (M.S.) with a major in Genetics and Genomics. Submitter: Connie Mulligan cmulligan@ufl.edu Created: 4/29/2024 11:43:07 AM Form version: 2

# Responses

#### Degree Name

Enter the name of the degree program.

M.S. degree with a major in Genetics and Genomics

#### CIP Code

Enter the six digit Classification of Instructional Programs (CIP) code for the degree program. The code has the numerical format XX.XXXX. Contact the <u>Office of Institutional Planning and</u> <u>Research</u> (OIPR) to verify the CIP code for the existing degree program.

26.0801

# **Current Total Credits**

Enter the current number of credits needed to complete the majors in the degree program.

33

#### **Proposed Total Credits**

Enter the proposed number of credits needed to complete the majors in the degree program.

30

# Do the total credit hours increase or decrease by 25% or more AND students' expected time to completion increases or decreases by more than one term

No

#### **Effective Term**

Enter the term (semester and year) that the requested change in total credits would be effective.

Earliest Available

#### **Effective Year**

Earliest Available

#### Pedagogical Rationale/Justification

Describe the rationale for the proposed change to the total credits. In accordance with the requirements of Section 1007.25, F.S., the Board of Governors may approve a request by a university board of trustees for a bachelor's degree program to exceed 120 credit hours to degree for the following reasons:

Additional courses are required to meet specialized accreditation standards for program content and such accreditation is expected or required for program graduates to become employed in the profession for which they are being prepared (e.g. Engineering, Architecture).
Additional courses are required to meet state or federal mandated criteria for professional licensing (e.g., Teacher Education).

• The degree program offers a unique and innovative learning experience, such as honors programs, individualized study, and other non-traditional approaches to education.

The required GMS5905 Foundations for a Career in Genetics & Genomics credits to be taken in Year 1 Summer will be reduced from 6 credits to 3 credits. This change accommodates additional career development activities during the summer term.

#### Impact on Initial Enrollment/Retention/Graduation

Describe the projected impact of the change in total credits on enrollment and on retention and graduation of students in the majors.

No impact on enrollment, retention, or graduation of students is expected.

#### Assessment Data Review

Describe the Student Learning Outcome and/or program goal data that was reviewed to support the proposed changes.

The change in credits relates to the following Student Learning Outcome. M.S. students will now take 3 credits (changed from 6 credits) of GMS5905 in Year 1 Summer and 5 credits of GMS5905 in Year 2 Fall:

- Students will acquire hands-on expertise in generating and analyzing genomic data, including the use of biostatistics, bioinformatics, machine learning, and artificial intelligence techniques, as assessed by earning a grade of A or B in GMS 5905 Foundations for a Career in Genetics & Genomics.

#### Academic Learning Compact and Academic Assessment Plan

Describe the modifications to the Academic Learning Compact and Academic Assessment Plan that result from the proposed change.

No modifications are necessary.

The non-thesis M.S. degree consists of  $\frac{33-30}{2}$  letter-graded credits taken over 4 semesters – a sample curriculum is provided below:

Year 1 Fall:

- PCB 5065 Advanced Genetics (4 credits)
- PHC 6052 Introduction to Biostatistical Methods (3 credits)
- GMS 6221 Ethics in Genetics (1 credit)
- GMS 6290 G&G seminar (1 credit)

Year 1 Spring:

- GMS 6231 Genomics and Bioinformatics (3 credits)
- PHC 6088 Statistical Analysis of Genetic Data (3 credits)
- GMS 6290 G&G seminar (1 credit)
- GMS 6014 Applications of Bioinformatics to Genetics (1 credit)
- Elective 1 of the following 1 credit courses:
  - o GMS 6224 Foundations in Precision Medicine: Medical Molecular Genetics
  - PHA 6134 Foundations in Precision Medicine: Genomic Technologies
  - PHC 6598 Foundations in Precision Medicine: Genetic Epidemiology

Year 1 Summer:

 GMS 5905 – Special topics in Biomedical Sciences/Foundations for a Career in Genetics & Genomics (we will create a new course proposal and allow 6 credits/semester, max of 12 credits) (<u>36</u> credits)

Year 2 Fall:

- GMS 5905 Special topics in Biomedical Sciences/Foundations for a Career in Genetics & Genomics (we will create new course proposal and allow 6 credits/semester, max of 12 credits) (5 credits)
- GMS 6290 G&G seminar (1 credit)
- Elective 1 of the following 3 credit courses or related courses:
  - BSC 6451 Computational Tools for Research in Biology
  - ANG 6532 Molecular Genetics of Disease
  - STA 6703 Statistical Machine Learning
  - BCH 6415 Advanced Molecular and Cellular Biology

Major courses for the M.S. degree in Genetics & Genomics include:

- PCB 5065 Advanced Genetics (4 credits)
- GMS 6014 Applications of Bioinformatics to Genetics (1 credit)
- GMS 5905 Special topics in Biomedical Sciences/Foundations for a Career in Genetics & Genomics (we will create a new course proposal and allow 6 credits/semester, max of 12 credits) (5-6 credits, taken twice)

Final term enrollment of GMS 6290 will serve as the capstone course and culminating experience for the M.S. degree and will include a final oral comprehensive examination.

Transfer of credits: Only graduate-level work (5000-7999) with a grade of B or better is eligible for transfer. A maximum of 9 transfer credits is allowed, and courses must duplicate the material covered in the M.S. in G&G curriculum. Credits must come from UF or institutions approved by UF. Credits transferred from other institutions are applied towards the degree

requirements, but grades earned are not computed in the student's grade point average. Acceptance of transfer of credit requires approval by the Coordinator of the Genetics & Genomics Graduate Program and the Dean of the Graduate School.

### Degree | Change\_Credits for request 19867

Info

Request: Master of Health Administration (M.H.A.) degree Major Credit Reduction Description of request: The College of Public Health and Health Professions seeks to reduce major credit from 57 to 50 for the Master of Health Administration (M.H.A.) degree. Submitter: April Oneal apriloneal3@ufl.edu Created: 5/1/2024 1:16:06 PM Form version: 2

**Responses Degree Name** *Enter the name of the degree program.* 

Master of Health Administration

#### CIP Code

Enter the six digit Classification of Instructional Programs (CIP) code for the degree program. The code has the numerical format XX.XXXX. Contact the <u>Office of Institutional Planning and</u> <u>Research</u> (OIPR) to verify the CIP code for the existing degree program.

51.0701

#### **Current Total Credits**

Enter the current number of credits needed to complete the majors in the degree program.

57

#### **Proposed Total Credits**

Enter the proposed number of credits needed to complete the majors in the degree program.

50

# Do the total credit hours increase or decrease by 25% or more AND students' expected time to completion increases or decreases by more than one term

No

#### **Effective Term**

Enter the term (semester and year) that the requested change in total credits would be effective.

Earliest Available

#### **Effective Year**

Earliest Available

#### Pedagogical Rationale/Justification

Describe the rationale for the proposed change to the total credits. In accordance with the requirements of Section 1007.25, F.S., the Board of Governors may approve a request by a university board of trustees for a bachelor's degree program to exceed 120 credit hours to degree for the following reasons:

Additional courses are required to meet specialized accreditation standards for program content and such accreditation is expected or required for program graduates to become employed in the profession for which they are being prepared (e.g. Engineering, Architecture).
Additional courses are required to meet state or federal mandated criteria for professional licensing (e.g., Teacher Education).

• The degree program offers a unique and innovative learning experience, such as honors programs, individualized study, and other non-traditional approaches to education.

Additional courses are required to meet specialized accreditation standards for program content and such accreditation is expected or required for program graduates to become employed in the profession for which they are being prepared.

Additional courses are required to meet state or federal mandated criteria for professional licensing (e.g., Teacher Education).

The degree program offers a unique and innovative learning experience, such as honors programs, individualized study, and other non-traditional approaches to education.

HSC 5536 is no longer required by our accreditation body, The Commission on Accreditation of Healthcare Management Education (CAHME). This course is not linked to any of the MHA Program Competencies. HSA 6855, at 5 credits, is significantly higher in credits than other Florida program's internships with the same number of required hours.

#### Impact on Initial Enrollment/Retention/Graduation

Describe the projected impact of the change in total credits on enrollment and on retention and graduation of students in the majors.

The change in credits from 57 to 50 does not impact the length of completing the MHA program. Having fewer credits should increase enrollment.

#### Assessment Data Review

Describe the Student Learning Outcome and/or program goal data that was reviewed to support the proposed changes.

HSC 5536 student learning outcomes were mapped to MHA Program Competencies. There are no student learning outcomes linked to program competencies. The accreditation body used to require a medical terminology course but no longer requires this course. Additionally, since HSC 5536 is the only course not taught by the College of PHHP in the MHA Program, there are no assessment activities in the course.

The MHA Advisory Council supported the request to drop HSC 5536 from the MHA Curriculum. This council is comprised of program alumni and practicing healthcare managers.

# Academic Learning Compact and Academic Assessment Plan

Describe the modifications to the Academic Learning Compact and Academic Assessment Plan that result from the proposed change.

These changes do not require changes to the Academic Learning Compact or Academic Assessment Plan.

# UF Master of Health Administration (MHA) Curriculum - Current

		YEAR 1	
SEMESTER	COURSE NUMBER	TITLE	CREDIT HOURS
	HSA 6114	U.S. Health Care System	3
	HSA 6115	Introduction to Management of Health Services Organizations	3
Fall	HSA 6105	Professional Skills Seminar	1
	HSA 6395	Healthcare Data Analytics I	3
	<u>HSA 5536</u>	Medical Terminology	<u>3</u>
Spring	HSA 5174	Fundamentals of Health Care Finance	3
	HSA 6126	US Health Insurance System	3
	HSA 6196	Healthcare Data Analytics II	3
	HSA 6436	Health Economics	3
	HSA 6105	Professional Skills Seminar	1
Summer	HSA 6855	Internship in Health Administration	<del>5<u>35</u></del>
		YEAR 2	
SEMESTER	COURSE NUMBER	TITLE	CREDIT HOURS
	HSA 6177	Health Care Finance	3
	HSA 6188	Strategic Management in Health Administration	3
Fall	HSA 6198	Information Management in Health Administration	3
		mornauon management in meaning tallout	0
	HSA 6427	Legal and Ethical Issues in Health Administration	3
	HSA 6427 HSA 6105	Legal and Ethical Issues in Health Administration Professional Skills Seminar	3 1
	HSA 6427 HSA 6105 HSA 6342	Legal and Ethical Issues in Health Administration Professional Skills Seminar Human Resource Management for Health Services Managers	3 1 3
	HSA 6427 HSA 6105 HSA 6342 HSA 6385	Legal and Ethical Issues in Health Administration         Professional Skills Seminar         Human Resource Management for Health Services Managers         Performance Management for Health Care Managers	3 1 3 3 3
Spring	HSA 6427 HSA 6105 HSA 6342 HSA 6385 PHC 6927PHC	Legal and Ethical Issues in Health Administration         Professional Skills Seminar         Human Resource Management for Health Services Managers         Performance Management for Health Care Managers         Introduction to Public Health         Foundations in Public Health	3 1 3 3 3 3
Spring	HSA 6427 HSA 6105 HSA 6342 HSA 6385 PHC 6937PHC 6937600	Legal and Ethical Issues in Health Administration         Professional Skills Seminar         Human Resource Management for Health Services Managers         Performance Management for Health Care Managers         Introduction to Public HealthFoundations in Public Health         Introduction to Public Health	3 1 3 3 3
Spring	HSA 6427 HSA 6105 HSA 6342 HSA 6385 PHC 6937PHC 6937600 HSA 6105	Legal and Ethical Issues in Health Administration         Professional Skills Seminar         Human Resource Management for Health Services Managers         Performance Management for Health Care Managers         Introduction to Public Health         Introduction to Public Health         Professional Skills Seminar	3 3 1 3 3 3 1 1

I

**Commented [CB1]:** This course name change was completed by the College for Spring 2024.

# Curriculum - Proposed

		<u>YEAR 1</u>	
<u>SEMESTER</u>	<u>COURSE</u> <u>NUMBER</u>	TITLE	CREDIT HOURS
	<u>HSA 6114</u>	U.S. Health Care System	<u>3</u>
Fall	<u>HSA 6115</u>	Introduction to Management of Health Services Organizations	<u>3</u>
<u>rall</u>	<u>HSA 6105</u>	Professional Skills Seminar	<u>1</u>
	<u>HSA 6395</u>	Healthcare Data Analytics I	<u>3</u>
	<u>HSA 5174</u>	Fundamentals of Health Care Finance	3
	HSA 6126	US Health Insurance System	<u>3</u>
<u>Spring</u>	<u>HSA 6196</u>	Healthcare Data Analytics II	<u>3</u>
	<u>HSA 6436</u>	Health Economics	<u>3</u>
	<u>HSA 6105</u>	Professional Skills Seminar	<u>1</u>
Summor	HSA 6855	Internship in Health Administration	1
<u>Summer</u>	<u>115A 0055</u>		<u> </u>
		<u>YEAK 2</u>	
<u>SEMESTER</u>	COURSE NUMBER	TITLE	CREDIT HOURS
	<u>HSA 6177</u>	Health Care Finance	<u>3</u>
	<u>HSA 6188</u>	Strategic Management in Health Administration	<u>3</u>
<u>Fall</u>	<u>HSA 6198</u>	Information Management in Health Administration	<u>3</u>
	<u>HSA 6427</u>	Legal and Ethical Issues in Health Administration	<u>3</u>
	<u>HSA 6105</u>	Professional Skills Seminar	<u>1</u>
	HSA 6342	Human Resource Management for Health Services Managers	3
	HSA 6385	Performance Management for Health Care Managers	3
Spring	PHC 6600	Foundations in Public Health	3
-19	HSA 6105	Professional Skills Seminar	1
	HSA 6939	Capstone Seminar in Health Administration	3

**Commented [CB2]:** This course name change was completed by the College for Spring 2024.

# New or Modified Doctorate (Ph.D.) <u>Online</u> Major/Concentration

#### New or Modified Proposal Process for Online Ph.D. Majors/Concentrations

New or modified academic program proposals are initiated and developed by faculty members. Approval of the proposal must be obtained from department chairs and college deans, and/or college curriculum committees before submission to Academic Affairs for review and consideration.

Directions: Please provide a concise but complete response to each section.

Program Location	Virtual
Degree Program Title	Aerospace Engineering – Remote Ph.D.
	Program Option
CIP Code	14.0201
Proposed Delivery (% Online)*	40%
Proposed Delivery (% Remote)*	60%
Proposed Delivery (% On campus)*	0%
<b>Enrollment Projections (Headcount)</b>	Upto 25% of enrollment projections for each
	Graduate Faculty member in Dept
Proposed Implementation Date	August 16, 2024
Emphasis	
Other SUS Programs	

\*In determining the percentages of proposed delivery methods please consult the following guidelines:

**Remote courses (or remote Ph.D.)** - Remote courses adhere to the fundamentals of face-to-face courses. Remote courses and experiences replace face-to-face classroom learning or other educational activities when face-to-face learning on campus in Gainesville is not physically possible for some students. Students participate synchronously with other students with instructors giving live lectures. These courses aren't necessarily designed to optimize online learning, and some students may be participating at a distance while other students participate face-to-face simultaneously. Having students join a live lab meeting, for example, from a remote location while other students were in person would be an example of a remote Ph.D. experience, and not just an online/distance learning experience. Students conducting supervised research off campus is another example of remote work.

**Online/Distance courses (or online Ph.D.)** – Online courses are designed under the assumption that all instructors and students are generally separated by time or space. Students have the flexibility (generally) to not attend specific lectures at specific times. Further, the courses and educational activities have been specifically designed to be most effective for a distance audience and not just modified from a face-to-face course. For example, all students would participate in lab meetings via Zoom, lab trainings for students have been prepared for students to be watched asynchronously, etc.

Program Summary (Briefly describe the proposed program or modification.)

1. Summarize the overall rationale for the new or modified academic program and consider the following in your response:

Academic Vetting	Please provide documentation of support for the proposal by graduate faculty and
	college curriculum committee.
	The proposal was discussed during a departmental faculty meeting on 11/29. This
	The proposal was discussed during a departmental faculty meeting on 11/28. This
	was followed up with an anonymous online vote where there was 89% approval.
Faculty Capacity (overload)	Will faculty teach students as part of a regular appointment or as overload (self-
Faculty Expertise	funded)? Do they have adequate capacity? What is the ratio of qualified doctoral
Student-Faculty Ratio	chairs to number of students, and will this change with introduction of online
Student-racuity Natio	chan's to humber of statents, and win this change with introduction of online
	programs? Role of adjuncts of other instructors?
	If the faculty member recruits a Ph.D. student with a remote Ph.D. program option
	(hereafter, called remote Ph.D. student) under this plan, the student will be part of
	that faculty member's regular appointment MAE faculty members will strive to
	maintain E active Dh.D. students /faculty including remote and an compus students
	maintain 5 active Ph.D. students/faculty including remote and on-campus students.
Recruitment/Admissions	What is the strategy for recruitment and achieving target enrollment numbers?
	International students?
	MAE Faculty and professional staff are creating outreach programs on every corner
	of the planet including a new set of YouTube videos introducing faculty. While we
	attract bright students who can releast to Coinceville, we less other notantial
	students who choose not to attend the University of Florida due to place-based
	work or family obligations that make relocation to Gainesville unrealistic. Students
	with place-based restrictions are often working professionals who are looking at a
	Ph.D. program to progress professionally and bring a rich expertise and a breadth of
	narsnectives to labs classes meetings and denartments
	perspectives to labs, classes, meetings, and departments.
	Boing able to offer a remote Db D, program ention is a legical extension of our
	Being able to other a remote Ph.D. program option is a logical extension of our
	current offerings and translate seamlessly into our current marketing plans and
	platforms. We anticipate that the new remote option will be particularly additive to
	non-traditional students and expand our market audience considerably. Anecdotally
	there have been requests from several working professionals to work towards a
	Dh D degree while still being at their workplace
Courses (Courseliter	11.D. degree while still being at their workplace.
Courses/Creaits	what will the programmatic components of the degree/concentration be? (e.g.,
Student Learning	courses vs. research for credit)
Outcomes	Synchronous vs. Asynchronous offerings.
	The Ph.D. program in MAE has an extremely flexible programmatic component, and
	this must remain so with the proposed remote option. Each individual faculty
	member reviews the student's previous credentials to determine if the student has
	the background knowledge and skills to be successful in the completion of the
	The background knowledge and skills to be successful in the completion of the
	research needed to complete the project and degree requirements. For the graded
	course component MAE has (and will continue to) offered the majority of its core
	courses through the EDGE program, and these course can make up the bulk of a
	student's course requirement. These courses are offered asynchronously with the
	an compute component and hence have component and eccomponent and hence
	j on-campus component and nence have some contents and assessments so there

online section.Research Experience Integrity of Research ExperienceHow will the research experience be guided? How will access to faculty be ensured to support research productivity?The research for remote Ph.D. students will be guided in the same manner that it is for on-campus Ph.D. students. The advent of simple and easy to use video/audio has enhanced the ability to communicate at a distance. Many labs have integrated virtual components into their operations that would seamlessly support a remote student. All Ph.D. students in MAE program are encouraged to give a short oral presentation annually starting their first year. This is consistent with remote Ph.D. students.Broadly speaking Individual Development Plans are consistent with remote advising. Specifically remote advising sessions via video calls can replace in-person meetings
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analysis, and manuscript writing. In computationally and theoretically intensive
programs this may encompass the entirety of research activities that form the
backbone of the research experience. This program may not be compatible with all
research as in the case where unique experimental facilities are required. We
propose that a student applying for a remote Ph.D. program option identify any
components that would require physical presence and develop a plan to address
chanenges.
Academic Milestones Any anticipated modifications to established milestones? Time to completion?
There are no modifications to the current milestones. The timing of forming a
supervisory committee (no later than the second semesters after enrolling the Ph.D.
program) and taking the qualifying exam (by the end of second year after enrolling
the Ph.D. program) is codified in the MAE Graduate Student Handbook and will be
monitored by Graduate Student Services in concert with the faculty advisor (i.e.,
chair of the supervisory committee). However, these milestones will be evaluated
individually based on the students proposed plan of study since several of the
milestones might be delayed due to a student being part-time. Research milestones
are determined by the agreed timeline set between the chair of the supervisory
committee and the student. This includes the completion of project deliverables and
the student's graduation goals/timeline. The student will work together with the
chair of the supervisory committee on developing, implementing, updating, and
reviewing their Plan of Study and Individual Development Plan. Time to degree is
desired to be between 4-6 years however this might be extended due to the part-
time nature of some students in the program.
<b>On Campus/Online Student</b> How will the program support equitable experiences for both on-campus and online
Experience students?
we already have several students who are obtaining their Ph.D. from various labs
and corporations around the US and are not in Gainesville. Those students still have
access to all services that are offered to other university students including I
support, and academic advising. Many have additional support services in their own
iocal area with employers or nost institutions and therefore do not utilize these
services. Similar to on-campus students, the MAE Graduate Student Services Office
niterceues on the student's benan in the student (1) needs something that they do
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Student Funding
Technology
Evaluation

Student Academic Support (Briefly describe the strategy for student support.)

Orientation	How will students be oriented to the program, department, or institution?
	Over the past few years MAE has developed "MAE Central," that consists of a set of videos (accessed through Canvas) for orientation. In addition, MAE Central has tutorials on how to complete many of the tasks that students need to do such as registration, etc. MAE Central was rolled out this past year and was used to the orientation of both on-campus and off-campus students successfully. The Graduate Student Services routinely communicates with students through electronic means to help students upon request. Additionally,

	individual faculty members typically have a peer group initial meeting
	that addresses student responsibilities and details about faculty
	expectations and communication.
Advising Strategy	What will the advising/mentoring strategy be, including appointment of
Mentoring Support	faculty to committees, etc.?
	<ul> <li>Although individual faculty handle mentoring differently, many labs have integrated, to various degrees, virtual components into their operations that would seamlessly support a remote student. Some strategies currently being used in the department include: <ul> <li>Weekly hybrid lab meetings with structured agendas and note-taking that include personal and project check-ins, co-coding session, and presentation reviews.</li> <li>Lab Slack (or similar) server with topical channels to allow students to collaborate on projects and connect in an asynchronous virtual space.</li> <li>Research relevant professional (virtual) working groups that meet regularly.</li> <li>Professional presentations with lab mates via subarea symposiums.</li> </ul> </li> <li>These are a handful of strategies that are currently being used to build lab and university culture within hybrid labs. Advising strategies will be specifically tailored to the faculty and student.</li> <li>Like on-campus students with affiliation with non-UF research facilities, it may be necessary to develop an MOU with that facility to distinguish research in develop an MOU with that facility to distinguish</li> </ul>
	scopes of work and negotiate IP. In addition, a credentialed individual from that facility could serve on the students' supervisory committee as a special member or possibly as part of the committee, provided a faculty appointment allowing this
Community/Connection	How will the program provide a community-based experience for
connection	program students?
	MAE currently has several interest-based community developments via
	topical seminar series (fluid dynamics, controls, etc). These are frequently hybrid (and this will be encouraged more) to accommodate field work or other needs of on-campus graduate students and could support remote students. In addition to this MAE Graduate Student Services has created Discord channels for both informational and social interactions amongst students. Furthermore, the remote students will be invited to participate in departmental online workshops and events and to join the MAE Graduate Student Council and with other MAE graduate students.
Travel/Conferences/PD	In what ways will the department support student travel, conference engagement, and professional development?

Students will be encouraged to apply for other travel grants that are
available on campus as well as faculty advisors using overhead accounts
to support these students to a greater extent. Faculty will be
responsible for assisting the student with travel.

**Workforce and Economic Development Needs** (Briefly describe how the proposal meets workforce and economic needs.)

3. Summarize how the new or modified academic program works to meet workforce and economic development needs and consider the following:

Market Analysis of Need	Is there a need for Ph.Dlevel positions in either industry or academia?
(industry/academia)	The market for students in this program will be no different than that of the students in our on-campus Ph.D. program. We are just seeking the ability to allow students that might not be able to physically be in Gainesville do to external constraints.
Competing Programs	To what extent are there existing academic programs with the same focus and modality?
	In searching the web there are a few online programs offering Ph.D.'s (for example University of Alabama ( https://online.ua.edu/degrees/phd-in- aerospace-engineering-and-mechanics/) in Mechanical and Aerospace Engineering, however, the focus of the program is not changing from MAE's traditional on-campus graduate program. In this program we will just take advantage of the fact that the majority of MAE's core courses are already offered online through the EDGE program to allow students to not reside in Gainesville hence competing programs will really be the same as our on-campus program.
State vs Self-Funding	How does the program anticipate being funded? Why?
	Faculty are currently receiving nine months of funding from the State of Florida to conduct research, teaching and service. Funding during the summer is derived from external research. We do not expect the remote Ph.D. program to change the faculty funding model.

### Additional Considerations:

4. If you have any additional information that should be considered in evaluating the proposal, please use this table:

Торіс	Brief explanation
Торіс	Brief explanation

Topic         Brief explanation	
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## New or Modified Doctorate (Ph.D.) Online Major/Minor/Concentration

### New or Modified Proposal Process for Online Ph.D. Majors/Minors/Concentrations

New or modified academic program proposals are initiated and developed by faculty members. Approval of the proposal must be obtained from department chairs and college deans, and/or college curriculum committees before submission to Academic Affairs for review and consideration.

Directions: Please provide a concise but complete response to each section.

Program Location	UF ESSIE – Weil Hall 365
Degree Program Title	Civil Engineering-Remote PhD Program
	Option
CIP Code	14.0801
Proposed Delivery (% Online)*	17%
Proposed Delivery (% Remote)*	83%
Proposed Delivery (% On campus)*	
Enrollment Projections (Headcount)	25% of enrollment projections for each
	Graduate Faculty member in Dept
Proposed Implementation Date	August 23, 2023
Emphasis	
Other SUS Programs	

\*In determining the percentages of proposed delivery methods please consult the following guidelines:

**Remote courses (or remote Ph.D.)** - Remote courses adhere to the fundamentals of face-to-face courses. Remote courses and experiences replace face-to-face classroom learning or other educational activities when face-to-face learning on campus in Gainesville is not physically possible for some students. Students participate synchronously with other students with instructors giving live lectures. These courses aren't necessarily designed to optimize online learning, and some students may be participating at a distance while other students participate face-to-face simultaneously. Having students join a live lab meeting, for example, from a remote location while other students were in person would be an example of a remote Ph.D. experience, and not just an online/distance learning experience. Students conducting supervised research off campus is another example of remote work.

Program Summary: (Briefly describe the proposed program or modification.)

A.Academic Vetting	Please provide documentation of support for the proposal by graduate faculty and college curriculum committee. <i>The Civil Engineering faculty met and after discussion voted to approve the Remote PhD proposal. The vote was 19 approved and 4 disapproved and 3 were absent.</i>
B. Faculty Capacity (overload) Faculty Expertise Student-Faculty Ratio	If the faculty member recruits a remote PhD student under this plan, the student will be part of that faculty member's regular appointment. Faculty members within ESSIE with significant research appointments should strive to have 4 active Doctoral students in their research group and the incorporation of a remote student would be considered part of that student advising group.
C. Recruitment/Admissions	ESSIE Faculty and professional staff are creating outreach programs on every corner of the planet. While we attract bright students who can relocate to Gainesville, we lose other potential students who choose not to attend the University of Florida due to place-based work or family obligations that make relocation to Gainesville unrealistic. Students with place-based restrictions are often working professionals who are looking at a PhD to progress professionally, who bring a rich expertise and a breadth of perspectives to labs, classes, meetings, and departments,
	Being able to offer a remote PhD is a logical extension of our current offerings and translate seamlessly into our current marketing plans and platforms. We anticipate that the new remote option will be particularly additive to non-traditional students and expand our market audience considerably. In our recent travels to professional conferences and site visits, we have been asked by prospective students if a remote program exists, and until now the answer was no. We believe the demand is there from both employers and prospective students within higher education.
	As a demonstration of this need and market for a remote PhD program, ESSIE is currently in the process of developing an MOU with an entity in Panama that wants to provide a place in country where professionals in the field can stay in their jobs and obtain a degree from UF. This MOU is starting with MS students but with this remote PhD plan in place, there would be no reason not to make it available at the same time. We are also developing a similar program in Italy and could offer this program to all ESSIE applicants, including these students.
D. Courses/Credits Student Learning Outcomes	An ESSIE PhD has always had an extremely flexible but rigorous programmatic component, and this must remain so with the proposed remote option. Each individual faculty member reviews the student's previous credentials to determine if the student has the background knowledge and skills to be successful in the completion of the research needed to complete the project and degree program. Students currently in ESSIE arrive with a range of course preparation. At the extremes, a student may only take one (1) letter graded course to establish a grade point average if they are fully prepared for their dissertation work while others may come with a different background and need additional coursework within ESSIE and across campus. Once the faculty member feels the student has the background necessary, the student will enroll in research credits. We do not anticipate that this will change for remote courses.

	However, we acknowledge that the coursework offered virtually (synchronously or
	asynchronously) may be reduced compared to the in-person option. We identify the
	following strategies to address this: (1) a remote independent study with the advisor
	to replace an in-person class, (2) direct request for a remote accommodation on an
	as needed basis, or (3) have the student visit on-site for a period to preform course
	work that cannot be accommodated remotely.
E. Research Experience	The research will be guided in the same manner that it is for face-to-face students.
Integrity of Research	Many labs have recently integrated virtual components into their operations that
Experience	would seamlessly support a remote student.
	Broadly speaking Individual Development Plans are consistent with remote advising.
	Specifically, remote advising sessions via video calls can replace in-person meetings
	to advise students on parts or the entire program including literature review data
	analysis and manuscript writing. In a computationally intensive program this may
	anonpass the entirety of research activities that form the backhone of the research
	experience. This program may not be compatible with all research as in the case
	where extensive or legal fieldwork is required. We propose that a student applying
	for a Remote DhD identify any components that would require physical processo
	and develop a plan to address shallonges
E Acadomic Milastones	There are no modifications to the surrent milestones. Each milestone is determined
r. Academic Whestones	hu the agreed timeline set between the chair and the student. This includes the
	completion of project deliverables and the student's own personal graduation
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	goals/timeline. The student will work together with the Chair on developing,
	implementing, updating, and reviewing their individual Development plan. Time to
	degree is between 3-5 years.
G. On Campus/Online	We already have several students who are obtaining their PhD from various
Student Experience	locations around the US and are not in Gainesville. Those students still have access
	to all services that are offered to other university students including IT support, and
	academic advising. Many have additional support services in their own local area
	with employers or host institutions and therefore do not utilize these services.
	Similar to in person students, the Academic Office intercedes on the student's behalf
	if the student (1) needs something that they do not have access to locally and then
	provides the resources when possible or refers the student to an appropriate
	campus office, (2) needs additional information or assistance regarding
	matriculation issues or academic issues, or (3) needs additional support from ESSIE,
	College, or University Administration in some regard.
H. Student Funding	ESSIE does not have TA lines of funding for graduate students. We anticipate many
	Remote students to either be self-supported or receive tuition support from an
	employer. Similar to in-person students, grant support or faculty-derived support is
	an additional option barring funder restrictions. International students may have
	difficulty being supported by grants, and that is something to be negotiated on a
	case-by-case basis with the funding agency.
I. Technology	Sufficient technological resources will be provided to the student to complete any
	UF sponsored research they are involved with either through providing the student a
	UF-owned computer (which will be configured to adhere to UFIT policies) to be used
	at their remote site or by providing them with remote access from a personally
	owned computer to an on-campus and/or a UF-approved cloud resources at which
	all of their research can be performed.
J. Evaluation	These students will be tracked by the Academic office regarding course completion
	and grades while coordinating with the faculty advisor, who will track each student's
	progress toward time to degree and completing set milestones. It is anticipated that

since these students will be part of the faculty member's regular cohort, the
program should be as successful for these participants as it is for face-to-face
students.

### **Student Academic Support:** (Briefly describe the strategy for student support.)

A. Orientation	We have had an online (Power point) version of orientation for over 10 years. The orientation is comprehensive, and the student receives this orientation with their admissions letter. In that communication, students are encouraged to direct questions to the appropriate office or their advisor prior to enrollment. The academic office addresses these questions immediately upon opening the communication. Additionally, each faculty member typically has a peer group initial meeting that addresses student responsibilities and details about faculty expectations and communication.
B. Advising Strategy Mentoring Support	their operations that would seamlessly support a remote student. Some
	<ul> <li>strategies currently being used in the department include:</li> <li>Weekly lab meetings with structured agendas and note-taking that include personal and project check-ins and presentation reviews. Written progress reports are submitted the day before the meeting to help the student reflect on their work and identify issues for discussion.</li> <li>Lab Slack (or similar) server with topical channels to allow students to collaborate on projects and connect in an asynchronous virtual space.</li> <li>Research relevant professional (virtual) working groups that meet regularly.</li> <li>Connection with other students in the lab via a weekly rotating 'SciChats' schedule when new students join lab.</li> <li>Professional presentations with lab mates via annual 'lab symposiums'.</li> </ul> These are just a handful of possible strategies that are currently being used to build lab and university culture within hybrid labs. Advising strategies will be specifically tailored to the faculty and student.
	Like in-person students with affiliation with non-UF research facilities, it may be necessary to develop an MOU with that facility to distinguish scopes of work and negotiate IP. In addition, a credentialed individual
	from that facility could serve on the students' committee as a special member or possibly as part of the committee, provided a faculty appointment allowing this.
C. Community/Connection	ESSIE formally encourages interest-based community development via topical seminar series. These are frequently hybrid to accommodate

	field work or other needs of on-campus graduate students and could support remote students. In addition to this, we propose a 10-15 minute period (either as part of the seminar or pre/post class) for a virtual social period where in person and on-line students can get to know each other less formally. As part of these seminars students frequently present their own research and, again, this can be equally available to online and in person students with dedicated facilitation.
	Informally ESSIE plans to bring UF students and faculty together at major conferences or for periodic on-campus events (see below).
D. Travel/Conferences/PD	ESSIE encourages students to apply for other travel grants that are available on campus as well as faculty to tap into overhead accounts to support these students to a greater extent. Faculty will be responsible for assisting the student with travel.

**Workforce and Economic Development Needs:** (Briefly describe how the proposal meets workforce and economic needs.)

3. Summarize how the new or modified academic program works to meet workforce and economic development needs and consider the following:

Market Analysis of Need (industry/academia)	See comments in 1C.
Competing Programs	After a web search, it doesn't appear that there are any top-tier US research institutions offering a specific remote degree in this area. There is at least one top-tier university (PSU) that offers an online Doctor of Engineering, but it is not specific to one field.
State vs Self-Funding	We do not anticipate additional cost burden for this program. Student funding is addressed above. Faculty are currently receiving nine months of funding from the State of Florida to conduct research, teaching and service. Funding during the summer is derived from external research. We do not expect the remote Ph.D. program to change the faculty funding model.

## New or Modified Doctorate (Ph.D.) Online Major/Minor/Concentration

### New or Modified Proposal Process for Online Ph.D. Majors/Minors/Concentrations

New or modified academic program proposals are initiated and developed by faculty members. Approval of the proposal must be obtained from department chairs and college deans, and/or college curriculum committees before submission to Academic Affairs for review and consideration.

Directions: Please provide a concise but complete response to each section.

Program Location	UF ESSIE – Weil Hall 365
Degree Program Title	Coastal and Oceanographic Engineering-
	Remote PhD Program Option
CIP Code	14.2401
Proposed Delivery (% Online)*	17%
Proposed Delivery (% Remote)*	83%
Proposed Delivery (% On campus)*	0
Enrollment Projections (Headcount)	25% of enrollment projections for each
	Graduate Faculty member in Dept
Proposed Implementation Date	August 23, 2023
Emphasis	
Other SUS Programs	

\*In determining the percentages of proposed delivery methods please consult the following guidelines:

**Remote courses (or remote Ph.D.)** - Remote courses adhere to the fundamentals of face-to-face courses. Remote courses and experiences replace face-to-face classroom learning or other educational activities when face-to-face learning on campus in Gainesville is not physically possible for some students. Students participate synchronously with other students with instructors giving live lectures. These courses aren't necessarily designed to optimize online learning, and some students may be participating at a distance while other students participate face-to-face simultaneously. Having students join a live lab meeting, for example, from a remote location while other students were in person would be an example of a remote Ph.D. experience and not just an online/distance learning experience. Students conducting supervised research off campus is another example of remote work.

Program Summary: (Briefly describe the proposed program or modification.)

A.Academic vetting	Please provide documentation of support for the proposal by graduate faculty and
	college curriculum committee.
	The Coastal and Oceanographic Engineering faculty met and after discussion
	voted to approve the Remote PhD proposal. The vote was 5 approved and 1
	disapproved.
B. Faculty Capacity	If the faculty member recruits a remote PhD student under this plan, the student
(overload)	will be part of that faculty member's regular appointment. Each faculty member
Faculty Expertise	within ESSIE should always maintain 4 active Doctoral students and the
Student-Faculty Ratio	incorporation of a remote student would be part of that.
C. Recruitment/Admissions	of the planet. While we attract bright students who can relocate to Gainesville, we lose other potential students who choose not to attend the University of Florida due to place-based work or family obligations that make relocation to Gainesville
	unrealistic. Students with place-based restrictions are often working professionals who are looking at a PhD to progress professionally, who bring a rich expertise and a breadth of perspectives to labs, classes, meetings, and departments,
	Being able to offer a remote PhD is a logical extension of our current offerings and translate seamlessly into our current marketing plans and platforms. We anticipate
	that the new remote option will be particularly additive to non-traditional students
	and expand our market audience considerably. In our recent travels to professional
	conferences and site visits, we have been asked by prospective students if a remote
	program exists, so until now, we have not been able to state that we were even
	considering one. We believe the demand is there from both employers and
	prospective students in all arenas within higher education.
	As a demonstration of this need and market for a remote PhD program FSSIE is
	currently in the process of developing an MOU with an entity in Panama that wants
	to provide a place in country where professionals in the field can stay in their jobs
	and obtain a degree from UF. This MOU is starting with MS students but with this
	remote PhD plan in place, there would be no reason not to make it available at the
	same time. We are also developing a similar program in Italy so we would include
	this program to all ESSIE applicants.
D. Courses/Credits	An ESSIE PhD has always had an extremely flexible programmatic component, and
Student Learning	this must remain so with the proposed remote option. Each individual faculty
Outcomes	member reviews the student's previous credentials to determine if the student has
	the background knowledge and skills to be successful in the completion of the
	research needed to complete the project and degree program. Students currently in
	ESSIE arrive with a range of course preparation. At the extremes, a student may only
	take one letter graded course to establish a grade point average if they are fully
	prepared for their dissertation work while others may come with a different
	background and need additional coursework within ESSIE and across campus. Once
	the faculty member feels the student has the background necessary, the student will
	enroll in research credits. We do not anticipate that this will change for remote
	courses.

E. Research Experience	However, we acknowledge that the coursework offered virtually (synchronously or asynchronously) may be reduced compared to the in-person option. We identify the following strategies to address this: (1) a remote independent study with the advisor to replace an in-person class, (2) direct request for a remote accommodation on an as needed basis, or (3) have the student visit on-site for a period to preform course work that cannot be accommodated remotely. The research will be guided in the same manner that it is for face-to-face students.
Integrity of Research	COVID has left an indelible mark on how science is done. Many labs have integrated
Experience	virtual components into their operations that would seamlessly support a remote student.
	Broadly speaking Individual Development Plans are consistent with remote advising. Specifically remote advising sessions via video calls can replace in-person meetings to advise students on parts or the entire program including literature review, data analysis, and manuscript writing. In a computationally intensive program this may encompass the entirety of research activities that form the backbone of the research experience. This program may not be compatible with all research as in the case where extensive or local fieldwork is required. We propose that a student applying for a Remote PhD identify any components that would require physical presence and develop a plan to address challenges.
F. Academic Milestones	There are no modifications to the current milestones. Each milestone is determined
	by the agreed timeline set between the chair and the student. This includes the completion of project deliverables and the student's own personal graduation
	goals/timeline. The student will work together with the Chair on developing,
	implementing, updating, and reviewing their Individual Development plan. Time to
G. On Campus/Online Student Experience	We already have several students who are obtaining their PhD from various labs around the US and are not in Gainesville. Those students still have access to all services that are offered to other university students including IT support, and academic advising. Many have additional support services in their own local area with employers or host institutions and therefore do not utilize these services. Similar to in person students, the Academic Office intercedes on the student's behalf if the student (1) needs something that they do not have access to locally and then provides the resources when possible or refers the student to an appropriate campus office, (2) needs additional information or assistance regarding matriculation issues or academic issues, or (3) needs additional support from ESSIE, College, or University Administration in some regard.
H. Student Funding	ESSIE does not have TA lines of funding for graduate students. We anticipate many Remote students to either be self-supported or receive tuition support from an employer. Similar to in-person students, grant support is an additional option barring funder restrictions. International students may have difficulty being supported by grants, and that is something to be negotiated on a case-by-case basis with the funding agency.
I. Technology	Sufficient technological resources will be provided to the student to complete any UF-sponsored research they are involved with either through providing the student a UF-owned computer (which will be configured to adhere to UFIT policies) to be used at their remote site or by providing them with remote access from a personally owned computer to an on-campus and/or a UF-approved cloud resources at which all of their research can be performed.

J. Evaluation	These students will be tracked by the Academic office regarding course completion and grades while coordinating with the faculty advisor, who will track each student's progress toward time to degree and completing set milestones. It is anticipated that since these students will be part of the faculty member's regular cohort, the program should be as successful for these participants as it is for face-to-face
	students.

### **Student Academic Support:** (Briefly describe the strategy for student support.)

A. Orientation	We have had an online (Power point) version of orientation for over 10 years. The orientation is comprehensive, and the student receives with their admissions letter. In that communication, students are encouraged to direct questions to the appropriate office or their advisor prior to enrollment. The academic office addresses these questions immediately upon opening the communication. Additionally, each faculty member typically has a peer group initial meeting that addresses student responsibilities and details about faculty
	expectations and communication.
B. Advising Strategy Mentoring Support	<ul> <li>COVID has left an indelible mark on how science is done. Many labs have integrated, to various degrees, virtual components into their operations that would seamlessly support a remote student. Some strategies currently being used in the department include: <ul> <li>Weekly hybrid lab meetings with structured agendas and note-taking that include personal and project check-ins, co-coding sessions, and presentation reviews.</li> <li>Lab Slack (or similar) server with topical channels to allow students to collaborate on projects and connect in an asynchronous virtual space.</li> <li>Research relevant professional (virtual) working groups that meet regularly.</li> <li>Connection with other students in the lab via a weekly rotating 'SciChats' schedule when new students join the lab.</li> <li>Professional presentations with lab mates via annual 'lab symposiums.'</li> </ul> </li> <li>These are just a handful of possible strategies that are currently being used to build lab and university culture within hybrid labs. Advising strategies will be specifically tailored to the faculty and the student.</li> </ul>
	may be necessary to develop an MOU with that facility to distinguish scopes of work and negotiate IP. In addition, a credentialed individual from that facility could serve on the student's committee as a special member or possibly as part of the committee, provided they hold a faculty appointment allowing for this.

C. Community/Connection	ESSIE formally encourages interest-based community development via topical seminar series. These are frequently hybrid to accommodate field work or other needs of on-campus graduate students and could support remote students. In addition to this, we propose a 10-15 minute period (either as part of the seminar or pre/post class) for a virtual social period where in-person and online students can get to know each other less formally. As part of these seminars, students frequently present their own research and, again, this can be equally available to online and in-person students with dedicated facilitation.
	Informally ESSIE plans to bring UF students and faculty together at major conferences or for periodic on-campus events (see below).
D. Travel/Conferences/PD	ESSIE encourages students to apply for other travel grants that are available on campus as well as faculty to tap into overhead accounts to support these students to a greater extent. Faculty will be responsible for assisting the student with travel.

**Workforce and Economic Development Needs:** (Briefly describe how the proposal meets workforce and economic needs.)

3. Summarize how the new or modified academic program works to meet workforce and economic development needs and consider the following:

Market Analysis of Need	See comments in 1C.
(industry/academia)	
Competing Programs	After a web search, it doesn't appear that there are any top-tier US research institutions offering a specific remote degree in this area. There is at least one top-tier university (PSU) that offers an online Doctor of Engineering, but it is not specific to one field.
State vs. Self-Funding	We do not anticipate additional cost burden for this program. Student funding is addressed above. Faculty are currently receiving nine months of funding from the State of Florida to conduct research, teaching and service. Funding during the summer is derived from external research. We do not expect the remote Ph.D. program to change the faculty funding model.

## New or Modified Doctorate (Ph.D.) Online Major/Minor/Concentration

### New or Modified Proposal Process for Online Ph.D. Majors/Minors/Concentrations

New or modified academic program proposals are initiated and developed by faculty members. Approval of the proposal must be obtained from department chairs and college deans, and/or college curriculum committees before submission to Academic Affairs for review and consideration.

Directions: Please provide a concise but complete response to each section.

Program Location	UF ESSIE – Weil Hall 365
Degree Program Title	Environmental Engineering Sciences-Remote
	PhD Program Option
CIP Code	14.1401
Proposed Delivery (% Online)*	15%
Proposed Delivery (% Remote)*	85%
Proposed Delivery (% On campus)*	0
Enrollment Projections (Headcount)	25% of enrollment projections for each
	Graduate Faculty member in Dept
Proposed Implementation Date	August 23, 2023
Emphasis	
Other SUS Programs	

\*In determining the percentages of proposed delivery methods please consult the following guidelines:

**Remote courses (or remote Ph.D.)** - Remote courses adhere to the fundamentals of face-to-face courses. Remote courses and experiences replace face-to-face classroom learning or other educational activities when face-to-face learning on campus in Gainesville is not physically possible for some students. Students participate synchronously with other students with instructors giving live lectures. These courses aren't necessarily designed to optimize online learning, and some students may be participating at a distance while other students participate face-to-face simultaneously. Having students join a live lab meeting, for example, from a remote location while other students were in person would be an example of a remote Ph.D. experience, and not just an online/distance learning experience. Students conducting supervised research off campus is another example of remote work.

Program Summary: (Briefly describe the proposed program or modification.)

A. Academic Vetting	Please provide documentation of support for the proposal by graduate faculty and
	college curriculum committee. The Environmental Engineering Sciences faculty met
	and after a long discussion voted to approve the Remote PhD proposal.
	The vote was 12 approved, none disapproved, and 2 abstain (Thus 12-0-2).
B. Faculty Capacity	Will faculty teach students as part of a regular appointment or as overload (self-
(overload)	funded)? Do they have adequate capacity? What is the ratio of qualified doctoral
Faculty Expertise	chairs to number of students, and will this change with the introduction of online
Student-Faculty Ratio	programs? Role of adjuncts or other instructors?
	If the faculty member recruits a remote PhD student under this plan, the student
	will be part of that faculty member's regular appointment. ESSIE faculty members
	will strive to maintain 4 active Doctoral students/faculty including remote and in-
	person residential students.
C. Recruitment/Admissions	What is the strategy for recruitment and achieving target enrollment numbers?
	International students?
	ESSIE Faculty and professional staff are creating outreach programs on every corner
	of the planet. While we attract bright students who can relocate to Gainesville, we
	lose other potential students who choose not to attend the University of Florida due
	to place-based work or family obligations that make relocation to Gainesville
	unrealistic. Students with place-based restrictions are often working professionals
	who are looking at a PhD to progress professionally, who bring a rich expertise and a
	breadth of perspectives to labs, classes, meetings, and departments,
	Being able to offer a remote PhD is a logical extension of our current offerings and
	translate seamlessly into our current marketing plans and platforms. We anticipate
	that the new remote option will be particularly additive to non-traditional students
	and expand our market audience considerably. In our recent travels to professional
	conferences and site visits, we have been asked by prospective students if a remote
	program exists, so until now, we have not been able to state that we were even
	considering one. We believe the demand is there from both employers and
	prospective students in all arenas within higher education.
	As a demonstration of this need and market for a remote PhD program ESSIE is
	currently in the process of developing an MOU with an entity in Panama that wants
	to provide a place in country where professionals in the field can stay in their jobs
	and obtain a degree from UE. This MOU is starting with MS students but with this
	remote PhD plan in place, there would be no reason not to make it available at the
	same time. We are also developing a similar program in Italy so we would include
	this program to all ESSIE applicants.
D. Courses/Credits	What will the programmatic components of the degree/concentration be? (e.g.,
Student Learning	courses vs. research for credit)
Outcomes	Synchronous vs. Asynchronous offerings.
	An ESSIE PhD has always had an extremely flexible programmatic component, and
	this must remain so with the proposed remote option. Each individual faculty
	member reviews the student's previous credentials to determine if the student has
	the background knowledge and skills to be successful in the completion of the

	research needed to complete the project and degree program. Students currently in
	ESSIE arrive with a range of course preparation. At the extremes, a student may only
	take one letter graded course to establish a grade point average if they are fully
	prepared for their dissertation work while others may come with a different
	background and need additional coursework within ESSIE and across campus. Once
	the faculty member feels the student has the background necessary, the student will
	enroll in research credits. We do not anticipate that this will change for remote
	courses.
	However, we acknowledge that the coursework offered virtually (synchronously or
	asynchronously) may be reduced compared to the in-person option. We identify the
	following strategies to address this: (1) a remote independent study with the advisor
	to replace an in-person class, (2) direct request for a remote accommodation on an
	as needed basis, or (3) have the student visit on-site for a period to preform course
	work that cannot be accommodated remotely.
E. Research Experience	How will the research experience be guided? How will access to faculty be ensured to
Integrity of Research	support research productivity?
Experience	
	The research will be guided in the same manner that it is for face-to-face students.
	COVID has left an indelible mark on how science is done. Many labs have integrated
	virtual components into their operations that would seamlessly support a remote
	student.
	Broadly speaking Individual Development Plans are consistent with remote advising
	Specifically remote advising sessions via video calls can replace in-person meetings
	to advise students on parts or the entire program including literature review, data
	analysis, and manuscript writing. In a computationally intensive program this may
	encompass the entirety of research activities that form the backbone of the research
	experience. This program may not be compatible with all research as in the case
	where extensive or local fieldwork is required. We propose that a student applying
	for a Remote PhD identify any components that would require physical presence
_	and develop a plan to address challenges.
F. Academic Milestones	Any anticipated modifications to established milestones? Time to completion?
	There are no modifications to the current milestones. Each milestone is determined
	by the agreed timeline set between the chair and the student. This includes the
	completion of project deliverables and the student's own personal graduation
	supervisory committee) on developing implementing updating and reviewing their
	Individual Development plan. Time to degree is between 4-5 years
G. On Campus/Online	How will the program support equitable experiences for both on-campus and online
Student Experience	students?
	We already have several students who are obtaining their PhD from various labs
	around the US and are not in Gainesville. Those students still have access to all
	services that are offered to other university students including IT support, and
	academic advising. Many have additional support services in their own local area
	with employers or host institutions and therefore do not utilize these services.
	Similar to in person students, the Academic Office intercedes on the student's behalf
	if the student (1) needs something that they do not have access to locally and then
	provides the resources when possible or refers the student to an appropriate
	campus office, (2) needs additional information or assistance regarding
	matriculation issues or academic issues, or (3) needs additional support from ESSIE,
	Conege, or oniversity Automistration in some regard.

H. Student Funding	For students enrolled full-time, what is the funding strategy? TA appointments for online students? International students?
	ESSIE does not have TA lines of funding for graduate students. We anticipate many Remote students to either be self-supported or receive tuition support from an employer. Similar to in-person students, grant support is an additional option barring funder restrictions. International students may have difficulty being supported by grants, and that is something to be negotiated on a case-by-case basis with the funding agency.
I. Technology	What technology will be required for these students? Software, etc.
	Sufficient technological resources will be provided to the student to complete any UF sponsored research they are involved with either through providing the student a UF-owned computer (which will be configured to adhere to UFIT policies) to be used at their remote site or by providing them with remote access from a personally owned computer to an on-campus and/or a UF-approved cloud resources at which all of their research can be performed.
J. Evaluation	What plans are in place to evaluate the success of the program within a 3-5 year time period?
	These students will be tracked by the Academic office regarding course completion and grades while coordinating with the faculty advisor, who will track each student's progress toward time to degree and completing set milestones. It is anticipated that since these students will be part of the faculty member's regular cohort, the program should be as successful for these participants as it is for face-to-face students.

### **Student Academic Support:** (Briefly describe the strategy for student support.)

A. Orientation	<i>How will students be oriented to the program, department, or institution?</i>
	We have had an online (Power point) version of orientation for over 10 years. The orientation is comprehensive, and the student receives it with their admissions letter. In that communication, students are encouraged to direct questions to the appropriate office or their advisor prior to enrollment. The academic office addresses these questions immediately upon opening the communication. Additionally, each faculty member typically has a peer group initial meeting that addresses student responsibilities and details about faculty expectations and communication.
B. Advising Strategy	What will the advising/mentoring strategy be, including appointment
Mentoring Support	of faculty to committees, etc.?

	COVID has left an indelible mark on how science is done. Many labs have
	COVID has left an indelible mark on now science is done. Many labs have
	integrated, to various degrees, virtual components into their operations that
	would seamlessly support a remote student. Some strategies currently being
	used in the department include.
	Weekiy hybrid lab meetings with structured agendas and hote-taking
	that include personal and project check-ins, co-coding session, and
	presentation reviews.
	Lab Slack (or similar) server with topical channels to allow students
	to collaborate on projects and connect in an asynchronous virtual
	space.
	Research relevant professional (virtual) working groups that meet
	regularly.
	Connection with other students in the lab via a weekly rotating
	SciChats' schedule when new students join lab.
	<ul> <li>Professional presentations with lab mates via annual 'lab</li> </ul>
	symposiums .
	huild lab and university sulture within hybrid labe. Advising strategies will be
	build lab and university culture within hybrid labs. Advising strategies will be
	specifically tailored to the faculty and student.
	Liberia and an about a with a ffiliation with a set UF approach for illuit
	Like in-person students with anniation with non-OF research facilities,
	It may be necessary to develop an MOU with that facility to distinguish
	scopes of work and negotiate IP. In addition, a credentialed individual
	from that facility could serve on the students' committee as a special
	member or possibly as part of the committee, provided a faculty
	appointment allowing this.
C. Community/Connection	How will the program provide a community-based experience for
	program students?
	ESSIE formally encourages interest-based community development via
	topical seminar series. These are frequently hybrid to accommodate
	field work or other needs of on-campus graduate students and could
	support remote students. In addition to this, we propose a 10-15
	minute period (either as part of the seminar or pro/post class) for a
	with a social partial where in parton and an line students can get to
	Virtual social period where in person and on-line students can get to
	know each other less formally. As part of these seminars students
	frequently present their own research and, again, this can be equally
	available to online and in person students with dedicated facilitation.
	Informally ESSIE plans to bring UF students and faculty together at
	major conferences or for periodic on-campus events (see below).
D. Travel/Conferences/PD	In what ways will the department support student travel, conference
	engagement, and professional development?
	ESSIE encourages students to apply for other travel grants that are
	available on campus as well as faculty to tap into overhead accounts to
	support these students to a greater extent. Faculty will be responsible
	for assisting the student with travel.

**Workforce and Economic Development Needs:** (Briefly describe how the proposal meets workforce and economic needs.)

3. Summarize how the new or modified academic program works to meet workforce and economic development needs and consider the following:

See comments in 1C.
After a web search, it does not appear that there are any top-tier US
research institutions offering a specific remote degree in this area. There
is at least one top-tier university (PSU) that offers an online Doctor of
Engineering but it is not specific to one field.
We do not anticipate additional cost burden for this program.
Student funding is addressed above. Faculty are currently receiving nine months of funding from the State of Florida to conduct research, teaching and service. Funding during the summer is derived from external research. We do not expect the remote Ph.D. program to change the faculty funding model

# New or Modified Doctorate (Ph.D.) <u>Online</u> Major/Concentration

### New or Modified Proposal Process for Online Ph.D. Majors/Concentrations

New or modified academic program proposals are initiated and developed by faculty members. Approval of the proposal must be obtained from department chairs and college deans, and/or college curriculum committees before submission to Academic Affairs for review and consideration.

Directions: Please provide a concise but complete response to each section.

Program Location	HWCOE – Rhines Hall 100
Degree Program Title	Materials Science and Engineering
CIP Code	14.1801
Proposed Delivery (% Online)*	10%
Proposed Delivery (% Remote)*	90%
Proposed Delivery (% On campus)*	0%
Enrollment Projections (Headcount)	3% of total PhD enrollment
Proposed Implementation Date	January 15, 2024
Emphasis	N/A
Other SUS Programs	

\*In determining the percentages of proposed delivery methods please consult the following guidelines:

**Remote courses (or remote Ph.D.)** - Remote courses adhere to the fundamentals of face-to-face courses. Remote courses and experiences replace face-to-face classroom learning or other educational activities when face-to-face learning on campus in Gainesville is not physically possible for some students. Students participate synchronously with other students with instructors giving live lectures. These courses aren't necessarily designed to optimize online learning, and some students may be participating at a distance while other students participate face-to-face simultaneously. Having students join a live lab meeting, for example, from a remote location while other students were in person would be an example of a remote Ph.D. experience, and not just an online/distance learning experience. Students conducting supervised research off campus is another example of remote work.

Program Summary (Briefly describe the proposed program or modification.)

Academic Vetting	Prepared by Associate Chair Michael Tonks. Completed on 9/14/2023.
_	Approved by MSE Graduate Coordinator Simon Phillpot on 9/15/2023
	Approved by Chair Michele Manuel on 9/15/2023
	Approved by MSE Curriculum Committee on 9/19/2023
	Approved by vote of MSE graduate faculty 11/2/2022
	Approved by vote of MSE graduate faculty 11/5/2025
Faculty Capacity (overload)	Remote PhD students will take courses and also carry out research under the
Faculty Expertise	direction of a faculty advisor.
Student-Faculty Ratio	
	Faculty teaching remote courses will do so as part of their regular appointment.
	These courses typically include a combination of remote and in-person students.
	Whether to mentor a remote student will always be the decision of the individual
	faculty member. If the faculty member decides to mentor a remote student, the
	time to advise the remote student will be included as part of the faculty member's
	regular appointment.
	We seek to have an average of five PhD students per faculty member, including both
	in-nerson and remote students
Descuitment (Admissions	Our MCE and ME DbD programs have actablished rearruitment and admissions
Recruitment/Admissions	Our IVISE and IVE PHD programs have established recruitment and admissions
	processes for in-person students, and we will extend these processes for use with
	remote students.
	For recruitment, we will modify our recruitment materials to mention that remote
	students will also be considered. We will also recruit our own in-person students, as
	they may transition to remote if an appropriate opportunity arises.
	For admissions, we will follow the same admission process that we do now. Our
	Graduate Admissions Committee will be tasked with evaluating applicants for
	admission for the Fall semester. The admissions criteria will be the same. We will
	only consider students living within the US for the remote PhD.
	If a student is already a registered in-person PhD student in good standing and they
	wish to transition to be a remote student, they will not need to reapply for
	admission. They will be able to transition with the approve of their advisor and with
	an approved petition for an externally-funded PhD.
Courses/Credits	The 12 credits of required courses are unchanged from our in-person PhD program
Student Learning	and they are already available via EDGE. We will use these EDGE courses for our
Outcomos	remote PhD students. Our 6 credits of electives will also be pulled from existing
Outcomes	EDCE courses
	EDGE (Duises.
	EIVIA 0920 (1 Creait) – We will add this course to EDGE. It will be done
	asynchronously with pre-recorded lectures.
	EMA 6941 (4 credits) – We have a supervised teaching requirement for our PhD
	students because it provides them with important mentoring experience that will
	help them in their future employment. This supervised teaching requirement will be
	waived for our remote students because they are having mentoring experience
	through their employment or military service.

	Seminar – Our PhD students are required to attend 10 hours of seminar each
	semester. Our remote students will be required to document 10 hours of similar
	technical content each semester.
	Research Credits (~65 credits) – Synchronous meetings with faculty advisor and
	asynchronous carrying out of research.
	See our graduate handbook for an example schedule.
Research Experience	The student will have a faculty advisor that will have virtual meetings with the
Integrity of Research	student to provide guidance and give recommendations. These meetings will be at
Experience	least every other week. When possible, opportunities for in person meetings will be
	developed, including visits to UF, visits by the faculty member to the student's
	workplace, and conferences.
	The close and ongoing engagement of the faculty member in the student's research
	will provide strong oversight of the academic integrity of the research activities.
Academic Milestones	The requirements for the qualifying exam proposal defense and final defense will
	he unchanged. The students must attend the proposal and final defense in person
	on campus
	The standards for passing these academic milestones will be the same for remote
	and in-person students. The research topic will be decided by the advisor and the
	external funding source, as is done for in-person students funded by industry
	contracts.
	Remote students will be expected to complete their PhD in 4 to 7 years.
On Campus/Online Student	Our PhD students are divided into research groups, typically organized around their
On Campus/Online Student Experience	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to
On Campus/Online Student Experience	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible
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On Campus/Online Student Experience	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development.
On Campus/Online Student Experience Student Funding	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development. Our remote students will be externally funded, typically by their employer or
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On Campus/Online Student Experience Student Funding	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development. Our remote students will be externally funded, typically by their employer or government agency; we will not allow remote students on GRA or TA appointments. Their tuition will be paid by the student and may be reimbursed by an employer or
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On Campus/Online Student Experience Student Funding	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development. Our remote students will be externally funded, typically by their employer or government agency; we will not allow remote students on GRA or TA appointments. Their tuition will be paid by the student and may be reimbursed by an employer or other agency, and we will ensure that they receive monthly payment equal to or greater than the minimum GRA stipend. Only students living in the US will be eligible to be externally funded remote students.
On Campus/Online Student Experience Student Funding Technology	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development. Our remote students will be externally funded, typically by their employer or government agency; we will not allow remote students on GRA or TA appointments. Their tuition will be paid by the student and may be reimbursed by an employer or other agency, and we will ensure that they receive monthly payment equal to or greater than the minimum GRA stipend. Only students living in the US will be eligible to be externally funded remote students. Remote students will have access to the same online software as in-person students.
On Campus/Online Student Experience Student Funding Technology	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development. Our remote students will be externally funded, typically by their employer or government agency; we will not allow remote students on GRA or TA appointments. Their tuition will be paid by the student and may be reimbursed by an employer or other agency, and we will ensure that they receive monthly payment equal to or greater than the minimum GRA stipend. Only students living in the US will be eligible to be externally funded remote students. Remote students will have access to the same online software as in-person students. It will be up to the faculty advisor to ensure that a remote student has access to all
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On Campus/Online Student Experience Student Funding Technology	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development. Our remote students will be externally funded, typically by their employer or government agency; we will not allow remote students on GRA or TA appointments. Their tuition will be paid by the student and may be reimbursed by an employer or other agency, and we will ensure that they receive monthly payment equal to or greater than the minimum GRA stipend. Only students living in the US will be eligible to be externally funded remote students. Remote students will have access to the same online software as in-person students. It will be up to the faculty advisor to ensure that a remote student has access to all technology required for successful completion of their degree, either from their employer or from the University of Florida.
On Campus/Online Student Experience Student Funding Technology Evaluation	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development. Our remote students will be externally funded, typically by their employer or government agency; we will not allow remote students on GRA or TA appointments. Their tuition will be paid by the student and may be reimbursed by an employer or other agency, and we will ensure that they receive monthly payment equal to or greater than the minimum GRA stipend. Only students living in the US will be eligible to be externally funded remote students. It will be up to the faculty advisor to ensure that a remote student has access to all technology required for successful completion of their degree, either from their employer or from the University of Florida.
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On Campus/Online Student Experience Student Funding Technology Evaluation	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development. Our remote students will be externally funded, typically by their employer or government agency; we will not allow remote students on GRA or TA appointments. Their tuition will be paid by the student and may be reimbursed by an employer or other agency, and we will ensure that they receive monthly payment equal to or greater than the minimum GRA stipend. Only students living in the US will be eligible to be externally funded remote students. Remote students will have access to the same online software as in-person students. It will be up to the faculty advisor to ensure that a remote student has access to all technology required for successful completion of their degree, either from their employer or from the University of Florida. The remote PhD program will be evaluated in the same manner that we evaluate our in-person PhD program.
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On Campus/Online Student Experience Student Funding Technology Evaluation	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development. Our remote students will be externally funded, typically by their employer or government agency; we will not allow remote students on GRA or TA appointments. Their tuition will be paid by the student and may be reimbursed by an employer or other agency, and we will ensure that they receive monthly payment equal to or greater than the minimum GRA stipend. Only students living in the US will be eligible to be externally funded remote students. Remote students will have access to the same online software as in-person students. It will be up to the faculty advisor to ensure that a remote student has access to all technology required for successful completion of their degree, either from their employer or from the University of Florida. The remote PhD program will be evaluated in the same manner that we evaluate our in-person PhD program.
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On Campus/Online Student Experience Student Funding Technology Evaluation	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development. Our remote students will be externally funded, typically by their employer or government agency; we will not allow remote students on GRA or TA appointments. Their tuition will be paid by the student and may be reimbursed by an employer or other agency, and we will ensure that they receive monthly payment equal to or greater than the minimum GRA stipend. Only students living in the US will be eligible to be externally funded remote students. Remote students will have access to the same online software as in-person students. It will be up to the faculty advisor to ensure that a remote student has access to all technology required for successful completion of their degree, either from their employer or from the University of Florida. The remote PhD program will be evaluated in the same manner that we evaluate our in-person PhD program. The Academic Services Office will track course completion and grades, in coordination with the faculty advisor. The faculty advisor will track each student's progress toward time to degree and completing all required milestones. The IDP will also be used to track the student's
On Campus/Online Student Experience Student Funding Technology Evaluation	Our PhD students are divided into research groups, typically organized around their faculty advisor. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development. Our remote students will be externally funded, typically by their employer or government agency; we will not allow remote students on GRA or TA appointments. Their tuition will be paid by the student and may be reimbursed by an employer or other agency, and we will ensure that they receive monthly payment equal to or greater than the minimum GRA stipend. Only students living in the US will be eligible to be externally funded remote students. Remote students will have access to the same online software as in-person students. It will be up to the faculty advisor to ensure that a remote student has access to all technology required for successful completion of their degree, either from their employer or from the University of Florida. The remote PhD program will be evaluated in the same manner that we evaluate our in-person PhD program. The faculty advisor will track course completion and grades, in coordination with the faculty advisor. The faculty advisor will track each student's progress toward time to degree and completing all required milestones. The IDP will also be used to track the student's progress towards their professional development.

Student Academic Support (Briefly describe the strategy for student support.)

Orientation	We hold a remote orientation for all incoming graduate students each summer. The remote students will be invited to this remote orientation. We will also record an additional in-person orientation that is held right before the start of the semester and make it available asynchronously to the remote PhD students.
Advising Strategy Mentoring Support	Remote students will be able to schedule remote advising meetings with the Academic Services Office (ASO) for questions regarding registration and academic requirements. The system for scheduling remote meetings with ASO is already in place.
	Remote students will get approval for their course registration each semester in the same manner as our in-person students. They will submit our registration form to the faculty advisor for approval, who will then send it to ASO.
	Remote students will meet with their faculty advisors at least every other week to discuss their research.
Community/Connection	The main avenue for community development for our remote PhD students will be their research group. Faculty members will develop mechanisms for remote students to participate in the full intellectual life of the group to the greatest extent possible through both asynchronous and, where possible, synchronous activities. They will encourage interactions between the remote and in-person students focused on both research and professional development.
Travel/Conferences/PD	The company or agency funding the PhD will also fund travel for our remote students. Conference engagement will be provided in the same manner as with our in-person students. The faculty advisor will assist remote students on selecting conferences to attend and helping the student to grow their professional network.
	Such conferences will often present opportunities for remote students to interact with their advisors and other group members synchronously. Professional development will be provided in the same manner as for our in-person students. The students will take our professional development course. For professional development mentoring, the remote students will complete the IDP on Canvas. Their faculty advisor
	will help them to prepare to meet their professional goals.

**Workforce and Economic Development Needs** (Briefly describe how the proposal meets workforce and economic needs.)

3. Summarize how the new or modified academic program works to meet workforce and economic development needs and consider the following:

Market Analysis of Need	Yes, there is a strong market for MSE PhDs, as demonstrated by our	
(industry/academia)	existing in-person MSE PhD program.	
Competing Programs	There are many in-person MSE PhD programs throughout the US. We	
	are unaware of any official online MSE PhD programs.	
State vs Self-Funding	The remote program will build on existing systems and courses already offered in our in-person PhD. Therefore, the funding avenue will be the same as these other programs.	

#### Additional Considerations:

4. If you have any additional information that should be considered in evaluating the proposal, please use this table:

Торіс	This proposal makes it possible for us to have students complete the requirements for a PhD without fulfilling the residency requirement. However, before the online/remote PhD can be pursued, the student must first get permission to do an externally funded PhD. This permission is obtained by submitting the "Petition to Waive Assistantship Requirement" form to the Academic Surfaces Office. It must be approved by the MSE petitions committee, department chair, and the associate dean for academic affairs.
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# New or Modified Doctorate (Ph.D.) <u>Online</u> Major/Concentration

### New or Modified Proposal Process for Online Ph.D. Majors/Concentrations

New or modified academic program proposals are initiated and developed by faculty members. Approval of the proposal must be obtained from department chairs and college deans, and/or college curriculum committees before submission to Academic Affairs for review and consideration.

Directions: Please provide a concise but complete response to each section.

Program Location	Virtual
Degree Program Title	Mechanical Engineering – Remote Ph.D.
	Program Option
CIP Code	14.1901
Proposed Delivery (% Online)*	40%
Proposed Delivery (% Remote)*	60%
Proposed Delivery (% On campus)*	0%
Enrollment Projections (Headcount)	Up to 25% of enrollment projections for each
	Graduate Faculty member in Dept
Proposed Implementation Date	August 16, 2024
Emphasis	
Other SUS Programs	

\*In determining the percentages of proposed delivery methods please consult the following guidelines:

**Remote courses (or remote Ph.D.)** - Remote courses adhere to the fundamentals of face-to-face courses. Remote courses and experiences replace face-to-face classroom learning or other educational activities when face-to-face learning on campus in Gainesville is not physically possible for some students. Students participate synchronously with other students with instructors giving live lectures. These courses aren't necessarily designed to optimize online learning, and some students may be participating at a distance while other students participate face-to-face simultaneously. Having students join a live lab meeting, for example, from a remote location while other students were in person would be an example of a remote Ph.D. experience, and not just an online/distance learning experience. Students conducting supervised research off campus is another example of remote work.

Program Summary (Briefly describe the proposed program or modification.)

Academic Vetting	Please provide documentation of support for the proposal by graduate faculty and	
	college curriculum committee.	
	The proposal was discussed during a departmental faculty meeting on 11/29. This	
	The proposal was discussed during a departmental faculty meeting on 11/28. This	
	was followed up with an anonymous online vote where there was 89% approval.	
Faculty Capacity (overload)	Will faculty teach students as part of a regular appointment or as overload (self-	
Faculty Expertise	funded)? Do they have adequate capacity? What is the ratio of qualified doctoral	
Student Faculty Patio	chairs to number of students, and will this change with introduction of online	
Student-Faculty Katio		
	programs? Role of adjuncts or other instructors?	
	If the faculty member recruits a Ph.D. student with a remote Ph.D. program option	
	(hereafter, called remote Ph.D. student) under this plan, the student will be part of	
	that faculty member's regular appointment. MAE faculty members will strive to	
	that faculty members regular appointment. Whe faculty members will strive to	
	maintain 5 active Ph.D. students/faculty including remote and on-campus students.	
Recruitment/Admissions	What is the strategy for recruitment and achieving target enrollment numbers?	
	International students?	
	MAE Faculty and professional staff are creating outreach programs on every corner	
	of the planet including a new set of YouTube videos introducing faculty. While we	
	of the planet including a new set of rourabe videos includeing facarty. While we	
	attract bright students who can relocate to Gainesville, we lose other potential	
	students who choose not to attend the University of Florida due to place-based	
	work or family obligations that make relocation to Gainesville unrealistic. Students	
	with place-based restrictions are often working professionals who are looking at a	
	Ph D program to progress professionally and bring a rich expertise and a breadth of	
	nerchastives to labe classes mostings and departments	
	l perspectives to labs, classes, meetings, and departments.	
	Being able to offer a remote Ph.D. program option is a logical extension of our	
	current offerings and translate seamlessly into our current marketing plans and	
	platforms. We anticipate that the new remote option will be particularly additive to	
	non-traditional students and expand our market audience considerably. Anecdotally	
	there have been requests from several working professionals to work towards a	
	Ph.D. degree while still being at their workplace.	
Courses/Credits	What will the programmatic components of the degree/concentration be? (e.g.,	
Student Learning	courses vs. research for credit)	
Outcomes	Synchronous vs. Asynchronous offerings.	
	The Ph.D. program in MAE has an extremely flexible programmatic component, and	
	this must remain so with the proposed remote option. Each individual faculty	
	this must remain so with the proposed remote option. Each multidal faculty	
	member reviews the student's previous credentials to determine if the student has	
	the background knowledge and skills to be successful in the completion of the	
	research needed to complete the project and degree requirements. For the graded	
	course component MAE has (and will continue to) offered the majority of its core	
	courses through the EDGE program and these course can make up the bulk of a	
	tourses through the LDOL program, and these course can make up the DUIK OF a	
	student's course requirement. These courses are offered asynchronously with the	
	on-campus component and hence have some contents and assessments so there	

	should not be any drop off in rigor between on campus students and those in an
	online section.
Research Experience	How will the research experience be guided? How will access to faculty be ensured to
Integrity of Research	support research productivity?
Experience	
	The research for remote Ph.D. students will be guided in the same manner that it is
	for on-campus Ph.D. students. The advent of simple and easy to use video/audio has
	enhanced the ability to communicate at a distance. Many labs have integrated
	virtual components into their operations that would seamlessly support a remote
	student. All Ph.D. students in MAE program are encouraged to give a short oral
	presentation annually starting their first year. This is consistent with remote Ph.D.
	students.
	Preadly speaking Individual Development Plans are consistent with remote advising
	Specifically speaking individual Development Plans are consistent with remote advising.
	to advice students on parts or the entire program including literature review, data
	analysis and manuscript writing. In computationally and theoretically intensive
	programs this may encompass the entirety of research activities that form the
	backhone of the research experience. This program may not be compatible with all
	research as in the case where unique experimental facilities are required. We
	propose that a student applying for a remote Ph.D. program option identify any
	components that would require physical presence and develop a plan to address
	challenges.
Academic Milestones	Any anticipated modifications to established milestones? Time to completion?
	There are no modifications to the current milestones. The timing of forming a
	supervisory committee (no later than the second semesters after enrolling the Ph.D.
	program) and taking the qualifying exam (by the end of second year after enrolling
	the Ph.D. program) is codified in the MAE Graduate Student Handbook and will be
	monitored by Graduate Student Services in concert with the faculty advisor (i.e.,
	individually based on the students proposed plan of study since several of the
	milectones might be delayed due to a student being part time. Research milectones
	are determined by the agreed timeline set between the chair of the supervisory
	committee and the student. This includes the completion of project deliverables and
	the student's graduation goals/timeline. The student will work together with the
	chair of the supervisory committee on developing, implementing, updating, and
	reviewing their Plan of Study and Individual Development Plan. Time to degree is
	desired to be between 4-6 years however this might be extended due to the part-
	time nature of some students in the program.
On Campus/Online Student	How will the program support equitable experiences for both on-campus and online
Experience	students?
	We already have several students who are obtaining their Ph.D. from various labs
	and corporations around the US and are not in Gainesville. Those students still have
	access to all services that are offered to other university students including IT
	support, and academic advising. Many have additional support services in their own
	local area with employers or host institutions and therefore do not utilize these
	services. Similar to on-campus students, the MAE Graduate Student Services Office
	intercedes on the student's behalf if the student (1) needs something that they do
	I not have access to locally and then provides the resources when possible or refers

	the student to an appropriate campus office, (2) needs additional information or
	assistance regarding matriculation issues or academic issues, or (3) needs additional
	support from MAE, College, or University Administration in some regard.
Student Funding	For students enrolled full-time, what is the funding strategy? TA appointments for
	online students? International students?
	MAE does not have TA lines of funding for graduate students. We anticipate many
	remote Ph.D. students to either be self-supported or receive tuition support from an
	employer under the same policies enforced by the University and College that
	govern on campus students. Similar to on-campus students, grant support is an
	additional option for remote Ph.D. students enrolled full-time barring funding
	agency restrictions. International students may have difficulty being supported by
	grants, and that is something to be negotiated on a case-by-case basis with the
	funding agency and UF HR.
Technology	What technology will be required for these students? Software, etc.
	The technology requirements will be the same as what is required of the on-campus
	students. Access to Canvas, their student portal, and video meetings are
	required/arranged by the chair of the supervisory committee or the University.
	Students may be expected to provide their own computer.
Evaluation	What plans are in place to evaluate the success of the program within a 3-6year time
	period?
	The remote Ph.D. student's progress will be monitored by the Graduate Student
	Services office regarding course completion and grades while coordinating with the
	chair of the supervisory committee, who will track each student's progress toward
	time to degree and completing set milestones. It is anticipated that since the
	students in this program will be part of the faculty member's regular cohort, the
	program should be as successful for these remote Ph.D. students as it is for on-
	campus students.
	campus students.

Student Academic Support (Briefly describe the strategy for student support.)

Orientation	How will students be oriented to the program, department, or institution?
	Over the past few years MAE has developed "MAE Central," that consists of a set of videos (accessed through Canvas) for orientation. In addition, MAE Central has tutorials on how to complete many of the tasks that students need to do such as registration, etc. MAE Central was rolled out this past year and was used to the orientation of both on-campus and off-campus students successfully. The Graduate Student Services routinely communicates with students through electronic means to help students upon request. Additionally,

	individual faculty members typically have a peer group initial meeting
	that addresses student responsibilities and details about faculty
	expectations and communication.
Advising Strategy	What will the advising/mentoring strategy be, including appointment of
Mentoring Support	faculty to committees, etc.?
	<ul> <li>Although individual faculty handle mentoring differently, many labs have integrated, to various degrees, virtual components into their operations that would seamlessly support a remote student. Some strategies currently being used in the department include: <ul> <li>Weekly hybrid lab meetings with structured agendas and note-taking that include personal and project check-ins, co-coding session, and presentation reviews.</li> <li>Lab Slack (or similar) server with topical channels to allow students to collaborate on projects and connect in an asynchronous virtual space.</li> <li>Research relevant professional (virtual) working groups that meet regularly.</li> <li>Professional presentations with lab mates via subarea symposiums.</li> </ul> </li> <li>These are a handful of strategies that are currently being used to build lab and university culture within hybrid labs. Advising strategies will be specifically tailored to the faculty and student.</li> <li>Like on-campus students with affiliation with non-UF research facilities, it may be necessary to develop an MOU with that facility to distinguish research in develop an MOU with that facility to distinguish</li> </ul>
	scopes of work and negotiate IP. In addition, a credentialed individual from that facility could serve on the students' supervisory committee as a special member or possibly as part of the committee, provided a faculty appointment allowing this
Community/Connection	How will the program provide a community-based experience for
connunty, connection	program students?
	MAE currently has several interest-based community developments via
	topical seminar series (fluid dynamics, controls, etc). These are frequently hybrid (and this will be encouraged more) to accommodate field work or other needs of on-campus graduate students and could support remote students. In addition to this MAE Graduate Student Services has created Discord channels for both informational and social interactions amongst students. Furthermore, the remote students will be invited to participate in departmental online workshops and events and to join the MAE Graduate Student Council and with other MAE graduate students.
Travel/Conferences/PD	In what ways will the department support student travel, conference engagement, and professional development?

Students will be encouraged to apply for other travel grants that are
available on campus as well as faculty advisors using overhead accounts
to support these students to a greater extent. Faculty will be
responsible for assisting the student with travel.

**Workforce and Economic Development Needs** (Briefly describe how the proposal meets workforce and economic needs.)

3. Summarize how the new or modified academic program works to meet workforce and economic development needs and consider the following:

Market Analysis of Need (industry/academia)	Is there a need for Ph.Dlevel positions in either industry or academia?
(	The market for students in this program will be no different than that of the students in our on-campus Ph.D. program. We are just seeking the ability to allow students that might not be able to physically be in Gainesville do to external constraints.
Competing Programs	To what extent are there existing academic programs with the same focus and modality?
	In searching the web there are a few online programs offering Ph.D.'s (for example University of Alabama ( <u>https://online.ua.edu/degrees/phd-in-</u> <u>mechanical-engineering/</u> ) in Mechanical and Aerospace Engineering, however, the focus of the program is not changing from MAE's traditional on-campus graduate program. In this program we will just take advantage of the fact that the majority of MAE's core courses are already offered online through the EDGE program to allow students to not reside in Gainesville hence competing programs will really be the same as our on-campus program.
State vs Self-Funding	How does the program anticipate being funded? Why?
	Faculty are currently receiving nine months of funding from the State of Florida to conduct research, teaching and service. Funding during the summer is derived from external research. We do not expect the remote Ph.D. program to change the faculty funding model.

### Additional Considerations:

4. If you have any additional information that should be considered in evaluating the proposal, please use this table:

Торіс	Brief explanation
Торіс	Brief explanation

Topic         Brief explanation	
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# New or Modified Doctorate (Ph.D.) <u>Online</u> Major/Concentration

### New or Modified Proposal Process for Online Ph.D. Majors/Concentrations

New or modified academic program proposals are initiated and developed by faculty members. Approval of the proposal must be obtained from department chairs and college deans, and/or college curriculum committees before submission to Academic Affairs for review and consideration.

Directions: Please provide a concise but complete response to each section.

Program Location	HWCOE – Rhines Hall 100
Degree Program Title	Nuclear Engineering Sciences
CIP Code	14.2301
Proposed Delivery (% Online)*	10%
Proposed Delivery (% Remote)*	75%
Proposed Delivery (% On campus)*	15%
Enrollment Projections (Headcount)	5% of total PhD enrollment for MSE
	10% of total PhD enrollment for NE
Proposed Implementation Date	January 15, 2024
Emphasis	N/A
Other SUS Programs	

\*In determining the percentages of proposed delivery methods please consult the following guidelines:

**Remote courses (or remote Ph.D.)** - Remote courses adhere to the fundamentals of face-to-face courses. Remote courses and experiences replace face-to-face classroom learning or other educational activities when face-to-face learning on campus in Gainesville is not physically possible for some students. Students participate synchronously with other students with instructors giving live lectures. These courses aren't necessarily designed to optimize online learning, and some students may be participating at a distance while other students participate face-to-face simultaneously. Having students join a live lab meeting, for example, from a remote location while other students were in person would be an example of a remote Ph.D. experience, and not just an online/distance learning experience. Students conducting supervised research off campus is another example of remote work.

Program Summary (Briefly describe the proposed program or modification.)

Academic Vetting	On Oct 9 <sup>th</sup> , 2023 the NE graduate faculty voted in favor of this proposal as motioned
	by the NE curriculum committee meeting on Oct 5 <sup>th</sup> .
Faculty Capacity (overload)	Remote PhD students will take courses and also carry out research under the
Faculty Expertise	direction of a faculty mentor
Student Eaculty Patio	
Student-Faculty Katio	Faculty tooching remote courses will do so as part of their regular ennointment
	Faculty teaching remote courses will do so as part of their regular appointment.
	For the faculty mentors, whether to mentor a remote student will always be the
	decision of the faculty member. If the faculty member decides to mentor a remote
	student, the time to advise the remote student will be included as part of the faculty
	member's regular appointment.
	We seek to have an average of five PhD students per faculty member, and this goal
	will include both in-person and remote students.
<b>Recruitment/Admissions</b>	Our MSE and NE PhD programs have established recruitment and admissions
	processes for in-person students, and we will extend these processes for use with
	remote students.
	For recruitment, we will modify our recruitment materials to mention that remote
	students will also be considered. We currently recruit to domestic and international
	students, and we will do so also for the remote program. We will also recruit our
	own in-nerson students, as they may transition to remote if an appropriate
	onnortunity arises
	opportunity anses.
	For admissions, we will follow the same admission process that we do now. Our
	Graduate Admissions Committee will be tasked with evaluating applicants. The
	admissions criteria will be the same
Courses (Credits	aumissions chiefla will be the same.
Courses/Creats	The students requires completion for 4 student-selected core NE courses to be
Student Learning	selected among existing courses. These are not currently given as edge or online
Outcomes	versions and would be the only in-person component of a remote PhD student. But
	there is no plan to make any or all NE graduate courses online/edge compatible.
	Selection of core courses is governed by the graduate handbook: "The approved
	graduate core course list consists of any graded (A-E) ENU lecture or lab course of
	three credits or more with numbers 5000+ excluding ENU 5005 Introduction to
	Nuclear Engineering". As such it is expected that a remote student would be at least
	part-time on campus attending some of those elective core courses similar to a
	regular PhD student.
	ENU6941 (1 credit) – It will be done asynchronously with pre-recorded lectures.
	ENU 6940 (4 credits) – This requirement has a mechanism to be waived for relevant
	professional development activities which is expected to exist for a remote PhD
	student. In general, a 10-week internship is sufficient to waive 2 CR of ENU6940.
	similar effort other professional development efforts will be considered
	Seminar (FNI 16935) – seminar requirement will be waived for our remote students
	Research Credits (~65 credits) – Synchronous meetings with faculty advisor and
	asynchronous carrying out of research
	asynchionous carrying out or research.

The student will have a faculty mentor that will have virtual meetings with the
student to provide guidance and give recommendations. The meetings will be on
average every other week.
Current milestone (qualifying exam, proposal defense, and final defense) will be
used with one modification on in-person attendance when allowed.
Remote students will be expected to complete their PhD in 4 to 7 years.
Our PhD students are divided into research groups, typically organized around their
faculty mentor. Faculty mentors will treat their remote students as a normal part of
their research group, modifying their group meetings to have a hybrid format so that
the remote student can participate synchronously. They will encourage interactions
between the remote and in-person students focused on both research and
professional development.
Our remote students will be externally funded; we will not allow remote students on
GRA or TA appointments. Their tuition will be paid by the student and may be
reimbursed by an employer or other agency, and we will ensure that they receive
monthly payment equal to or greater than the minimum GRA stipend. Students
living both domestically and internationally will be eligible to be externally funded
remote students.
Remote students will have access to the same online software as in-person students.
It will be up to the faculty mentor to ensure that a remote student has access to all
technology required for successful completion of their degree, either from their
employer or from the University of Florida.
The remote PhD program will be evaluated in the same manner that we evaluate
our in-person PhD program. The Academic Services Office will track course
completion and grades, in coordination with the faculty advisor. The faculty advisor
will track each student's progress toward time to degree and completing all required
milestones. The graduate coordinator will also monitor the progress of the remote
students.

### Student Academic Support (Briefly describe the strategy for student support.)

Orientation	We hold a remote orientation for all incoming graduate students each summer. The remote students will be invited to this remote orientation. We will also record an additional in-person orientation that is held right before the start of the semester and make it available asynchronously to the remote PhD students
Advising Strategy Mentoring Support	Remote students will be able to schedule remote advising meetings with the Academic Services Office (ASO) for questions regarding registration and academic requirements. The system for scheduling remote meetings with ASO is already in place.
	Remote students will get approval for their course registration each semester in the same manner as our in-person students. They will submit our registration form to the faculty mentor for approval, who will then send it to ASO.

Community/Connection	Remote students will meet with their faculty advisors at least every other week to discuss their research. The main avenue for community development for our remote PhD students will be their research group. Their faculty mentor will modify their group meetings to be hybrid and will ensure interaction between the remote and in person students.
Travel/Conferences/PD	For remote students that are externally funded, the company or agency funding their PhD will also fund their travel. Conference engagement will be provided in the same manner as with our in-person students. The faculty advisor will assist remote students on selecting conferences to attend and helping the student to grow their professional network.
	Professional development will be provided in the same manner as for our in-person students. The students will take our professional development course. For professional development mentoring, the remote students will complete the IDP on Canvas. Their faculty mentor will help them to prepare to meet their professional goals.

**Workforce and Economic Development Needs** (Briefly describe how the proposal meets workforce and economic needs.)

3. Summarize how the new or modified academic program works to meet workforce and economic development needs and consider the following:

Market Analysis of Need	Yes, there is a strong market for NE PhDs, as demonstrated by our
(industry/academia)	existing in-person NE PhD program.
Competing Programs	There are ~25 in-person NE PhD programs throughout the US. We are
	unaware of any official remote NE PhD program in existence.
State vs Self-Funding	The remote program will build on existing systems and courses already
	offered in our in-person PhD. Therefore, the funding avenue will be the
	same as these other programs.

### Additional Considerations:

4. If you have any additional information that should be considered in evaluating the proposal, please use this table:

Торіс	N/A
Торіс	N/A
Торіс	N/A