COASTAL AND MARINE SYSTEM SCIENCE MASTER'S STUDENT HANDBOOK

Academic Year 2026 – 2027

TEXAS A&M UNIVERSITY CORPUS CHRISTI

COLLEGE OF SCIENCE

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This handbook is intended to be read in conjunction with the Graduate Catalog: https://catalog.tamucc.edu/graduate/ and the Graduate Student Handbook, link from https://www.tamucc.edu/academics/graduate-education/masters-students.php

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SECTION I. COASTAL AND MARINE SYSTEM SCIENCE PROGRAM

Introduction

This handbook serves as a companion to the official Graduate Catalog (https://catalog.tamucc.edu/graduate/science/masters/coastal-marine-system-science-ms/) for the year of entry to the graduate program and Graduate Education's Graduate Student Handbook (Link from https://www.tamucc.edu/academics/graduate-education/masters-students.php) . In the case of any contradiction between this handbook and the Graduate Catalog and Graduate Student Handbook, the latter two documents serve as the ultimate source of information.

The section on the thesis proposal in this handbook is particularly important because it is not covered in the Graduate Education's Graduate Student Handbook, but it is essential for understanding the path to graduation with a Master's Degree in Coastal and Marine System Science (CMSS).

The M.S. in Coastal & Marine System Science (CMSS)

Highly interdisciplinary, the Coastal and Marine System Science (CMSS) degree program is designed to serve graduate students with diverse backgrounds in natural, computational & social sciences, and engineering. Ideal candidates will have backgrounds in some combination of biology, chemistry, geology, oceanography, computer science, mathematics, engineering, economics, policy, social, or geographic information science. The CMSS program focuses on integrative concepts that have emerged in recent years, linking natural sciences to social sciences.

System Science is a new discipline that seeks to understand the relationships between all of the variables affecting a given phenomenon. Graduates of the CMSS program will demonstrate proficiency in understanding and applying the concepts and principles of all of the natural sciences as well as a working competence in mathematical modeling and geospatial analysis.

If you want a degree that will allow you to make a difference, consider being part of this unique program.

Graduate Faculty & Staff

Dr. Ingo Pecher.
Coordinator, Coastal and Marine System Science
NRC 2509, (361) 825-4141
ingo.pecher@tamucc.edu
Please send program-related messages to cmss@tamucc.edu

- Administer and support the CMSS program
- Collaborate with faculty on all issues related to the program
- Collaborate with graduate students to ensure their success

Academic Advisors
College of Science – contact depends on last name.
Please refer to https://www.tamucc.edu/academics/planning/academic-advising/colleges/cos.php

- Advise on program requirements
- Liaison for student with Graduate Studies regarding required documentation submission throughout educational career
- Coordinate with student admission process
- Currently (Nov. 2025): Stephanie Hock (for students with last name starting with A-K), Deborah Dubuque (last name T-Z).

Alessandra Garcia
Sr. Administrative Assistant, Physical and Environmental Science Department
NRC 3500, (361) 825-2814
alessandra.garcia@tamucc.edu

- Assist CMSS Coordinator and faculty
- Create Independent Studies and Research Courses for the CMSS students
- Assist CMSS students for travel arrangement and supply purchasing

Feiqin Xie, Ph.D.
Interim Chair, Physical and Environmental Science Department
NRC 3507, (361) 825-2814
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- Administer department that hosts the CMSS program
- Coordinate course scheduling and teaching assignments for faculty

Objectives

The **objectives** of the CMSS Master program are to:

- support interdisciplinary research and scholarship on the biotic and abiotic components of coastal and marine zones, including quantitative and qualitative investigation of socio-economic and policy processes;
- integrate the tools of Earth System Science: biogeochemistry, geographic information science, ecosystem dynamics, and quantitative modeling to address the issues confronting coastal and marine environment.

The **objectives** of our graduates are to:

- acquire the skills required for system science studies applied to coastal and marine topics such that they are prepared to conduct CMSS original research;

- perform original and hypothesis-driven quantitative analyses that will lead to comprehensive verifiable models of natural systems;
- emphasize mathematical and/or analytical skills to generate new data and critically evaluate models that will aid in our understanding of dynamic natural systems
- become capable of answering environmental "what if" questions by providing comprehensive interpretation;
- develop the skills necessary to present and publish their work at national and international venues;
- develop a skill set and research record such that they can secure employment in universities, governmental agencies, private companies or non-governmental organizations where they can apply the skills and knowledge acquired during the program.

Get Connected

Most official college and program information for students is distributed on listservs. It is required that you join the CMSS listserv by sending a message with "Subscribe" in the subject to cmss-list@sci.tamucc.edu or go to https://listserv.tamucc.edu/mailman/listinfo.

List address	Description
cmss-list@listserv.tamucc.edu	CMSS students (**REQUIRED**)
msgso@listserv.tamucc.edu	Marine Science Graduate Student Association
escistu-list@listserv.tamucc.edu	Environmental Science students

SECTION II. ADMISSION INFORMATION

Application Requirements

To apply, complete the online Apply Texas Form.

Specific information on University criteria, application procedures, fees, and additional requirements for international applications are found in the page on Graduate Admissions in the Catalog

Required Documents

Below is a summary of the supporting documents required by the CMSS program:

- Completed university graduate application form.
- Graduate Record Examination (GRE) scores that are not more than 5 years old (temporarily waived)
- An essay of about 1000 words describing educational and career goals, interests as they relate to the faculty in the CMSS Program. Persons seeking admission to the PhD Program in CMSS must first contact the program faculty and identify a faculty member willing to serve as the graduate advisor. Applicants will not be admitted to the program without a graduate advisor.
- Three letters of evaluation from people familiar with your scholarly potential.
- Transcripts of all previous undergraduate and/or graduate work (including transcript evaluations of all work done at foreign institutions)*.
- Any relevant supplemental materials such as publications or resumes that include information about relevant experiences.
- International students have additional requirements. See Admissions +"International Students" and Graduate Admissions in the Catalog +"Additional Documents for International Students" for additional information

*To be considered official, all required postsecondary academic records must be submitted directly from the registrar's office and bear the seal and signature of the registrar of the institution. In some foreign countries, the controller of examinations or principal may certify academic records. Official English translations, not interpretations, are required from most countries.

Applicants seeking admission to the MS Program in CMSS should first contact the program faculty and identify a faculty member willing to serve as the graduate advisor. Applicants will not be admitted to the program without a graduate advisor. Applicants may optionally submit other relevant materials, e.g., copies of published works or reports of past scientific research, if any. All materials submitted will be considered. A campus visit with personal interviews involving prospective faculty mentors is also recommended. Completed applications must be received by the Graduate Admissions Office by the deadlines below or posted here. Incomplete applications are not considered. The applicant will be notified of acceptance or rejection by letter.

To schedule a visit, please contact:

Dr. Ingo Pecher	Ms. Alessandra Garcia

CMSS Program Coordinator	Sr. Administrative Assistant
or	
mailto:ingo.pecher@tamucc.edu	alessandra.garcia@tamucc.edu
(361) 825-4141	(361) 825-2814

Application Deadlines

The CMSS program has two types of application deadlines: 1) priority deadlines and 2) final deadlines. All students should strive to meet the priority deadline because it is used to make decisions regarding funding of assistantships. Applications received after the priority deadline will be considered as late applications, and funding options that were available for priority deadline applications may no longer be available. CMSS program final deadlines are earlier for international students because of the time required to process visa applications for international students.

Please refer to CMSS program "+Application Deadlines" for up-to-date deadlines.

CMSS APPLICATION DEADLINES			
International Students	**Fall**	**Spring**	**Summer**
Priority deadline to receive complete applications.	January 10	June 1	December 1
Last date to receive complete applications.	June 1	November 1	December 1
Domestic Students	**Fall**	**Spring**	**Summer**
Priority deadline to receive complete applications.	January 10	August 1	December 1
Last date for receipt of complete applications.	July 17	November 5	March 1

Admission Requirements

Students accepted into the CMSS MS program must demonstrate proficiency in the natural sciences, mathematical modeling, or geospatial technology. This proficiency can be demonstrated by the successful completion of undergraduate classes in these topics, or by presentation of satisfactory evidence to the CMSS Program Coordinator. Students who are unable to demonstrate proficiency in the natural sciences, mathematics, or geospatial technology may be required to take undergraduate or graduate leveling courses in these areas. These courses will not count toward the coursework required for the MS degree.

The acceptance process has two steps: 1) vote for acceptance by the CMSS faculty, and 2) final and official acceptance by the Graduate Admissions. The applicant will be notified of his/her acceptance or rejection by Graduate Admissions

Persons seeking admission to the program should first contact the program faculty and identify a faculty member, or members, willing to serve as the graduate supervisor, and the applicant must include a summary of their discussions with faculty members in their essay. Applicants will not be admitted to the program without a graduate supervisor.

University Admissions Requirements

To be admitted to a program of graduate study, an applicant must hold a bachelor's degree from an accredited institution of higher education in the United States or an equivalent foreign institution. *(Note: The requirement to hold a bachelor's degree does not apply to students enrolling in the RN-MSN option in nursing.)* Decisions concerning admission to graduate study are based on all admission criteria. To be considered for a graduate program, a minimum last 60-hour GPA of 2.5 is required. Some programs may have higher GPA requirements; review specific program information in the graduate catalog or elsewhere in this handbook. For complete information, see the Catalog, Graduate Admissions section.

Graduate students should be aware of their enrollment status, as it may impact financial aid, veteran's benefits, or other important aspects of graduate life. In addition, international students have specific requirements about enrollment status. Enrollment status for graduate students is as follows:

Full-time graduate student	Fall or spring term = 9 hours
	Combined summer terms = 6 hours
Three-quarter-time graduate student	Fall or spring term = 7 hours
	Combined summer terms = 5 hours
Half-time graduate student:	Fall or spring term = 5 hours
	Combined summer terms = 3 hours

Students seeking admission to a terminal degree program with Texas A&M University-Corpus Christi must apply through the University's Graduate Education website.

Specific information on University criteria, application procedures, fees, and additional requirements for international applications are found in Admissions – Apply Today.

Time Limit to Degree

Time Limit

The requirements for a master's degree at Texas A&M University-Corpus Christi must be completed within seven years subsequent to admission to the program. The seven-year period begins the first semester of enrollment and is calculated from the date of degree conferral. Credit that is more than seven years old will not be counted toward a master's degree. Exceptions will require strong justification in writing from the student requesting the exception as well as submission of a revalidation plan. Credits earned at another university are not eligible for an exception. Written approval from the major department chairperson, the dean of the college offering the degree, the Graduate Dean, and the Provost are required. See the revalidation process below.

Revalidation of Courses Beyond Degree Time Limit

Revalidation requests should be made through the student's academic advisor. Requests will require documentation and approval at the department, college, and administration level and will be facilitated by academic advising.

Financial Support

Students seeking full consideration for graduate assistantships should have a completed application file submitted by the priority deadline of December 1 (Fall admission only). However, applicants must apply separately for scholarships and assistantships at the College website: https://www.tamucc.edu/science/student-information/graduate-funding.php

After the priority deadline, any awards will be made on a first come, first served basis. Students who have received offers of assistantships must notify the CMSS Program Coordinator and the College of Science Dean's office of their acceptance by April 15 or within one week of receiving the offer letter, whichever is later. Otherwise, the University will assume that the offer has been rejected and will make offers to other students.

Admission to the program is decided independently of financial awards. Students must first be accepted into the program before financial awards can be considered. For details regarding graduate assistantships, refer to the Graduate Assistantship Handbook.

Teaching Assistantships

Teaching assistantships are available each year through the College of Science; see Graduate Funding Opportunities.

The State of Texas requires international graduate students whose native language is not English to obtain English proficiency certification before serving as graduate teaching assistants. The State of Texas requires international graduate students whose native language is not English to obtain English proficiency certification before serving as graduate teaching assistants. See Graduate Education's Graduate Assistantship Handbook (currently not available – 11/25/2025) for details.

Research Assistantships

A limited number of research assistantships are available through research institutes or centers, and individual faculty members; consult with the institute or center directors and individual faculty members to identify these funding sources. Some graduate research assistantships are administered through the College of Science; see Graduate Funding Opportunities.

Harte Research Institute Fellowships

A limited number of Fellowships may be available through the Harte Research Institute for Gulf of Mexico Studies (HRI). These fellowships are for students working with the HRI Endowed Chairs in the Institute. Application is made directly with an HRI Endowed Chair.

Eligibility

All students who hold assistantships of any type must be enrolled as full-time students (at least 9 graduate hours during the fall and spring semesters, and 3 hours during the combined summer session) in the CMSS program. Appointments are for two full semesters (fall and spring). Reappointment requires reapplication each year, and students should not assume that the appointment will continue automatically. Summer assistantships may be available but must be applied for separately. Check Research & Innovation's Graduate Funding website for additional funding opportunities.

Out-of-State Tuition Waiver

Graduate assistants are eligible for a tuition waiver that reduces tuition to Texas Resident rates. However, this must be applied for each semester, and a student must work in a half-time (20 hrs/week) position and be enrolled in 9 credit hours during fall and spring semesters and 3 credit hours during the summer to be eligible for the waiver. To apply for the waiver, visit the Office of Graduate Excellence's Assistantships website.

Cost of Education

Graduate education can be expensive, and many students may want to estimate their financial commitment. For estimates of the cost of attendance, visit Costs & Aid's Cost of Attendance website.

New Student Orientation

Please view the "New Student Checklist" for graduate students. The web-site on "Am I required to complete orientation?" provides further information on orientation for graduate students.

SECTION III. ACADEMIC PROGRESSION

Enrollment Status

All CMSS students are expected to be enrolled full-time, which is 9 hours during the fall and spring semesters and 3 hours during the combined summer session.

In addition, all CMSS students must follow University rules governing graduate studies including, but not limited to: residency, continuous enrollment, recency of credit, leave of absence, transfer credit, degree plans, grade point average, scholastic probation, enforced withdrawal, out-of-state tuition waivers, and the Texas 99-hour rule. All of these rules are described in the Graduate Student Handbook (Link from: https://www.tamucc.edu/academics/graduate-education/masters-students.php).

Master's Program Forms

Each step of the progression in the master's program is accompanied by a requisite form, which is created and maintained by the Office of Graduate Studies. Always download the most recent version of the doctoral forms. These can be found at the Graduate Education Forms and Templates webpage.

In addition, the forms webpage also include templates for the dissertation title page, copyright page, and committee member page.

All forms are submitted electronically on the Graduate Education Forms and Templates webpage. Form links initiate the required signature process via Docusign and questions about the process can be directed to the Office of Graduate Education.

If you have questions or require additional information, contact the Office of Graduate Education.

Checklist and Academic Progression

Please check the Master's and MFA Thesis Student Checklist to make sure you are fulfilling all requirements and for timely academic progression.

Graduation Deadlines

You must submit a completed application for graduation to your academic advisor by the posted deadline. The application must be obtained and processed through your advisor.

In order to graduate, a series of deadlines must be met. These deadlines are posted by the Registry: https://www.tamucc.edu/academics/registrar/academic-calendar/masters-dates.php

Commencement

For dates, times and location of the commencement ceremonies please visit http://commencement.tamucc.edu.

Degree Plan

The degree plan will be administered by the academic advisor. The degree plan must be completed *within the first 18 semester hours* (two long semesters) and must be signed by all committee members. Furthermore, degree plans should be developed by the time students have completed *half the course work in the program*.

After the graduate advisory committee approves the degree plan, it must be filed with the College of Science CMSS Academic Advisor, CMSS Program Administrative Assistant, and Graduate Education. After a tentative degree plan is finalized, degree plan development will be documented in the student's online degree planner by the academic advisor. Exceptions and changes to degree plans require consultation with your academic advisor. The graduate advisory committee and Graduate Education must approve any changes or elective coursework if the courses are to be applied to the total semester hours required for the degree. Prior to graduation, a final degree plan that includes any approved changes from the tentative degree plan will be circulated to the chair of the graduate advisory committee, program coordinator, and Department chair for final approval.

Graduate Advisory Committee

The purpose of the graduate advisory committee is to provide guidance and technical advice from a diverse viewpoint throughout the student's research experience. The committee chair (typically the graduate advisor) is the principal source of research guidance. The other members of the committee are selected by the student and should be chosen to provide complementary expertise to that of the committee chair. All committee members must have graduate faculty status at TAMUCC.

The chair is selected at the start of the student's **first semester**, and the full committee must be selected within the **first two long semesters**. The graduate advisory committee consists of at least three CMSS members (https://www.tamucc.edu/science/roster.php?program=cmss), one of which is the committee chair. Additional members from outside the CMSS faculty may be approved by the Office of Graduate Education (OGE). In exceptional cases, individuals holding graduate faculty rank at TAMU-CC or another accredited institution may serve as co-chair with the unanimous approval of the CMSS faculty on the committee. In all cases involving the appointment of a non-CMSS Ph.D. faculty member, a graduate faculty status request accompanied by a curriculum vitae and a rationale for the appointment must be provided to the CMSS Program Coordinator and filed with the OGE. The advisory committee must be documented with *Form A: Thesis Advisory Committee Appointment Form* (all forms accessed via Graduate Education Forms and Templates, +Master's Program). Any changes to the committee require that *Form D: Thesis Committee Member Change Request Form*.

Together, the graduate advisory committee and the student prepare a degree plan detailing the coursework necessary for the student's program of study, select a thesis topic and formulate a research plan. The graduate advisory committee also approves the thesis proposal and final manuscript, and final thesis defense/oral examination. Signed copies of the degree plan must be sent to the College of Science Dean's Office (Academic Advisor, see Page 2) and the College of Graduate Studies by end of **the second long semester**.

Composition and size of the graduate advisory committee should reflect the scope of the intended graduate program and should be developed with substantial input from the student's primary advisor(s). After the committee is formed, the primary advisor will normally become the committee

chair. Individual faculty members are under no obligation to serve on a committee or to be the committee chair. The decision not to serve should be based on definable criteria such as work overload or incompatible research interests.

The advisory committee chair supervises the student's thesis research, including preparation of the thesis manuscript. The committee as a whole approves the degree plan, thesis proposal, thesis manuscript and final thesis defense/oral examination. Beyond these functions, the chair and advisory committee members should serve as valuable mentors.

If possible, students should meet with their committee by the end of the **first long semester** but no later than the end of the **second long semester**. The goal of the first committee meeting is to allow students to introduce themselves and their academic and research interests to the committee and to finalize a degree plan. Students should remain in close contact with their graduate advisory committee during all phases of graduate study and thesis research to keep them informed of progress and setbacks. At least annually, students must meet with their advisory committee to update the committee regardless of progress.

Students are responsible for calling required annual meetings of the committee and any other meetings deemed necessary by either the student or a committee member. The student is responsible for maintaining a written record of advisory committee meetings including conclusions reached. The student also submits all necessary paperwork and reports from the graduate advisory committee to the CMSS Administrative Assistant. Copies of meeting notes will be placed in the student's program file by the CMSS Administrative Assistant.

Degree Requirements

Each student admitted to the CMSS Master's degree program ***must complete a minimum of 36 hours beyond the bachelor's degree*** (at the 5000- or 6000-level). A student's advisory committee must approve the degree plan. All students must successfully complete at least 9 semester credit hours per long semester to remain in the program. All students must pass a final thesis defense, to be administered by their advisory committee, during their last semester before graduation.

The program normally requires a minimum of 18 credit hours of regular graded coursework. Justification for exceptions to this rule should be prepared by the student and advisor(s), endorsed by the advisory committee, and attached to the degree plan when submitted for the department head's signature.

Curriculum

Core: Required Courses (12 semester credit hours)

1. CMSS 5392 THESIS I: THESIS PROPOSAL
2. CMSS 5393 THESIS II: THESIS RESEARCH
3. CMSS 5394 THESIS III: THESIS SUBMISSION

Core course group 1: Mandatory (3 hours)

4. CMSS 6312 COMMUNICATING SCIENCE SEMINAR

Core: Course Choices (12 semester credit hours)

Core course group 2: Transdisciplinary core courses (2 courses, or 6 hours) are selected from:

CMSS 6307 COASTAL AND MARINE SYSTEMS
GSEN 6330 SPATIAL SYSTEMS SCIENCE
CMSS 6370 COASTAL MANAGEMENT AND OCEAN LAW
CMSS 6359 MARINE ECOSYSTEM DYNAMICS

Core course group 3: Math and statistics core courses (2 courses, or 6 hours) are selected from:

MATH 6315 STATISTICAL METHODS IN RESEARCH I
MATH 6316 STATISTICAL METHODS IN RESEARCH II
CMSS 6323 EXPERIMENTAL DESIGN
CMSS 6352 ENVIRONMENTAL FORECASTING
CMSS 6360 COMPUTER PROGRAMMING IN EARTH SYSTEM SCIENCES

Elective, Specialized and Topical Courses (12 semester credit hours)

Elective coursework (12 sem. hrs.) supporting the student's individual research goals is chosen from biology, chemistry, coastal and marine system science, computer science, environmental science, geographic information science, geology, math, marine biology, public policy, socio-economics, or other course offerings including independent studies, in consultation with student's advisory committee.

Topical coursework should be approved by the graduate advisory committee, and is offered under the heading of:

CMSS 6590 Advanced Topics

Students can also enroll in a Directed Independent Study, supervised by their advisor or other faculty members, at any stage of the program progression:

CMSS 5596 Directed Independent Study

Students may also enroll in CMSS 5940 - Thesis Project Research (1-9 sem. hrs.) to conduct research related to the CMSS MS thesis project. Up to six hours may count as credit toward regular graded (non-research, non-variable credit) elective coursework for the MS degree requirement in Coastal and Marine System Science.

CMSS 5940 Thesis Project Research

The remainder of classes or research projects designated as part of the elective coursework requirement must receive the approval of a student's graduate advisory committee. Students must demonstrate to the committee that the selection of classes or research projects produces a coherent course of study focused on the student's particular area of emphasis. Depending on the emphasis area, selections may include coastal and marine system science, marine biology, the natural sciences, computer science, geographic information science, mathematics, political science, public administration, business law, or other areas as stipulated by the graduate advisory committee.

CMSS Core Curriculum Course Descriptions

These courses are to be taken by all CMSS MS Program students. See "Degree Requirements" above for details on the core curriculum. ***Elective courses are described in the Graduate Catalog.*** Information on leveling courses may be found there or in the Undergraduate Catalog.

CMSS 6307 3 sem. hrs. (3:0) COASTAL AND MARINE SYSTEMS
Description of coastal and oceanic ecosystems to provide an overview of the fundamental concepts of the abiotic and biotic components, physical-chemical processes, and interactions with environmental and human systems.

CMSS 6312 3 sem. hr. (3:0) COMMUNICATING SCIENCE SEMINAR
Covers communication topics ranging from proposal writing to professional presentations with a minor emphasis on additional non-traditional communication formats. Must be taken to fulfill degree plan requirements by all Coastal and Marine System Science graduate students and is recommended in the first spring of the degree.

CMSS 6323 3 sem. hrs. (3:0) EXPERIMENTAL DESIGN
Fundamental concepts of mathematical ecology and the design and analysis of environmental experiments. Students Learn SAS programming and procedures to compute ecological metrics, data management techniques, exploratory analysis, power, sample size, checking assumptions, and analysis of variance models to compute a priori and post hoc hypothesis tests. Prerequisite: Math 5315 Statistical Methods in Research I, undergraduate equivalent, or consent of instructor.

CMSS 6352 3 sem. hrs. (3:0) ENVIRONMENTAL FORECASTING
Statistical techniques (classic and Bayesian) and new artificial intelligence-based techniques, such as neural networks, for the analysis of environmental systems with large datasets. Prerequisite: CMSS 6305.

CMSS 6359 3 s. sem. hrs. (3:0) MARINE ECOSYSTEM DYNAMICS
Investigation of the interactions between organisms and physical processes that regulate marine ecosystem functions.

CMSS 6360 3 sem. hrs. (3:0) COMPUTER PROGRAMMING IN EARTH SYSTEM SCIENCE
This course is to enhance the programming skills of graduate students under various scientific programming environments. The focus is on the data analysis and problem-solving using Python, R,

MATLAB and IDL. The contents of the course include the basic concepts of the operating systems and high-level programming languages, basics of programming in Python, general data analysis methods and tools, common scientific data formats, publication quality scientific graphics, the critical steps of building a large programming project.

CMSS 6370 3 sem. hrs. (3:0) COASTAL MANAGEMENT AND OCEAN LAW
Intensive study of the 1972 National Coastal Zone Management Act and subsequent coastal management programs. The Texas program, which is administered by the General Land Office, will be dealt with in depth as the central focus of the course. Statutory law relating to citizen, state, and federal rights and duties as they impact coastal and maritime law will be studied including applicable Texas real property law. Students will use case law studies relating to those rights and duties and Public Trust Doctrine cases to gain an integral part of understanding the responsibilities of governments and rights of citizens.

GSEN 6330 3 sem. hrs. (3:0) SPATIAL SYSTEMS SCIENCE
Introduction and advanced usages of mapping datums, coordinate systems, and accuracy requirements for geographic information systems (GIS). Use of GIS tools to investigate statistical patterns and relationships among maps and geo-databases. Derivation of new maps and analysis based on spatial context, patterns, surface configuration, proximity, connectivity and flows. Prerequisites: MATH 6316 or permission of instructor.

MATH 6315 3 sem. hrs. (2:2) STATISTICAL METHODS IN RESEARCH I
This course is for graduate students in other disciplines and is designed to prepare them to use statistical methods in their research. This is a non-calculus exposition of the concepts, methods and usage of statistical data collection and analysis. Topics include descriptive statistics, the t-test, the one and two-way analysis of variance, multiple comparison tests, and multiple regression. Students also learn how to conduct these analyses using computer software and how to properly report their findings. Prerequisite: MATH 1442 or 3342.

MATH 6316 3 sem. hrs. (2:2) STATISTICAL METHODS IN RESEARCH II
This course is a continuation of MATH 6315 . Topics include: statistical experimental design, randomized blocks and factorial analysis, multiple regression, chi-squared tests, analysis of covariance, non-parametric methods and sample surveys. Emphasis will be placed on the computer analysis of research data and how to properly report statistical findings. Prerequisite: MATH 6315.

Thesis Information

Thesis Course Series

Three courses are taken for the main research component of the degree, CMSS 5392 Thesis I: Thesis Proposal, CMSS 5393 Thesis II: Thesis Research, and CMSS 5394 Thesis III: Thesis Submission. These required thesis-related courses must be taken by all students. CMSS 5393 may be taken more than once, if approved by the graduate advisory committee.

Thesis Format

The thesis must be prepared in a format and style prescribed by the advisory committee. Guidance can be found in the Graduate Student Handbook (Link from https://www.tamucc.edu/academics/graduate-education/masters-students.php)

Final Thesis Defense

Each student must pass a final thesis defense examination during the last semester before graduation, to be administered by the student's graduate advisory committee. The exam will cover topics related to (1) all graduate coursework undertaken for the CMSS program, (2) the student's thesis research area, and (3) broad concepts of system science, requiring familiarity with the literature and appropriate professional societies. The student is responsible for scheduling the defense in consultation with the graduate advisory committee. A student who fails the defense may repeat it once, but only after an interval of four months or more. If a student fails the second defense, he or she will be terminated from the program. Students must enroll in the course CMSS 5394 Thesis III: Thesis Submission during the semester in which they are planning to defend the thesis and/or graduate.

Thesis/ Culmination Event/ Exit Requirements

Preliminary drafts of the thesis are typically reviewed by the committee chair. The final draft of the written product is presented to the full committee for comments and/or changes. The final approval of the thesis occurs at the final oral examination.

The culminating event is the final oral examination, also known as the Final Defense. Grades for the final course, CMSS 5394 Thesis Submission, will be entered only after all requirements have been met.

The final thesis will be submitted to the ProQuest ETD, see link in Master's Checklist

Notification of Intent to Graduate

Graduation upon completion of the course requirements is NOT automatic. The semester before graduation is anticipated, students should obtain an application from the Office of Admissions and Records by the deadline date indicated in the University Class Schedule. Deadline dates are also available on the Texas A&M University-Corpus Christi website (https://www.tamucc.edu/grad-college/current-students/masters-dates.php).

Graduation

TAMU-CC confers graduate degrees at the close of each regular semester and 10-week summer session. final degree audits are conducted by the Registrar's Office and students should ensure

they're compliant by following the links to the doctoral dates already included. Questions about degree audits can also be directed to the Office of Graduate Education.

Important Master's thesis dates and Doctoral dissertation dates are available at the Registrar:
https://www.tamucc.edu/academics/registrar/academic-calendar/masters-dates.php
https://www.tamucc.edu/academics/registrar/academic-calendar/doctoral-dates.php

Information on graduation application deadlines fees is available through the Registrar's Office at:
https://www.tamucc.edu/academics/registrar/degrees-graduation/apply-for-graduation.php

SECTION IV. GENERAL INFORMATION ON GRADUATE STUDIES

General Information

This section of the handbook includes standardized information about rules and policies pertaining to graduate education at Texas A&M University. It is not intended to be comprehensive. You are strongly encouraged to read the sections of the catalog pertaining to graduate students, which will provide more detail and additional topics that may impact you. You will also find information about your program.

Graduate Admissions

Please refer to the catalog: https://catalog.tamucc.edu/graduate/admissions/

To be admitted to a program of graduate study, an applicant must hold a bachelor's degree from an accredited institution of higher education in the United States or an equivalent foreign institution. *(Note: The requirement to hold a bachelor's degree does not apply to students enrolling in the RN-MSN option in nursing.)* Decisions concerning admission to graduate study are based on all admission criteria. To be considered for a graduate program, a minimum last 60-hour GPA of 2.5 is required. Some programs may have higher GPA requirements; review specific program information in the graduate catalog or elsewhere in this handbook. All applications must be made through Apply Texas. For more information about the application process, visit the Application Process page on the Graduate Education website or see the Catalog, Graduate Admissions section.

Graduate students should be aware of their enrollment status, as it may impact financial aid, veteran's benefits, or other important aspects of graduate life. In addition, international students have specific requirements about enrollment status. Enrollment status for graduate students is as follows:

Full-time graduate student	Fall or spring term = 9 hours
	Combined summer terms = 6 hours
Three-quarter-time graduate student	Fall or spring term = 7 hours
	Combined summer terms = 5 hours
Half-time graduate student:	Fall or spring term = 5 hours
	Combined summer terms = 3 hours

General Academic Policies and Regulations

From catalog: https://catalog.tamucc.edu/graduate/general-academic-policies-regulations/

Student Responsibility

University personnel may assist students in progressing toward the degree that they are seeking. However, the final and ultimate responsibility for understanding and following the degree requirements rests with the students themselves. Each student is held responsible for knowing degree requirements, for enrolling in courses that fit into degree programs, and for taking courses in the proper sequence to ensure orderly progression of work. The student must seek advice about degree requirements and other University rules when necessary. The student is held responsible for knowing and abiding by University requirements regarding the standard of work required to continue in the

University, as well as those dealing with academic integrity, scholastic probation, enforced withdrawal, suspension, and dismissal. Additionally, the student is expected to comply with the rules and processes in the Student Code of Conduct, which is administered by the Office of Student Conduct & Advocacy. The Student Code of Conduct is accessible at http://www.tamucc.edu/~students.

Registration

Students admitted to the University may register for course work. See the admission classification system in the "Admissions" chapter of the catalog for limits. Former graduate students who have been inactive for two years or more must reapply for admission to the Graduate Admissions prior to the term of re-enrollment. Note that some programs may require re-application after only a one-year leave of absence. Doctoral students must remain continuously enrolled. See the Continuous Enrollment and Leave of Absence policy for more information. Specific information regarding dates, registration materials, and course offerings may be found in the class schedule for each term (published during the preceding term). Students must register by the specified deadlines for the term in order to be eligible to receive course credit. Registration requires payment of tuition and fees. See "Tuition, Fees, and Financial Assistance" http://businessoffice.tamucc.edu/tuition_and_fees/index.html .

In order to attend a course offered at TAMU-CC (whether in-person or online), an individual must either be enrolled in the course as a student or employed by TAMU-CC and attending the course for a legitimate business need. The instructor of record for the course may also allow visitors to attend a course on a limited basis with prior approval.

Enrollment Status

Graduate students should be aware of their enrollment status, as it may impact financial aid, veteran's benefits, or other important aspects of graduate life. In addition, international students have specific requirements about enrollment status.

Enrollment status for graduate students is as follows:

Full-time graduate student	Fall or spring term = 9 hours
	Combined summer terms = 6 hours
Three-quarter-time graduate student	Fall or spring term = 7 hours
	Combined summer terms = 5 hours
Half-time graduate student:	Fall or spring term = 5 hours
	Combined summer terms = 3 hours

From Graduate Student Handbook (Link from https://www.tamucc.edu/academics/graduate-education/masters-students.php)

Leave of Absence

There is no university-wide continuous enrollment requirement for master's students. However, all graduate students who have been inactive for one year or more must contact the Registrar in order to register. Students who have been inactive for two or more years must reapply for admission. Some programs may require re-application after only a one-year absence. **Time spent away from the program without an approved leave of absence request (see below) will count toward a student's time to degree.**

Students experiencing life-changing or catastrophic events (e.g., serious illness of a student or immediate family member, death of an immediate family member) are encouraged to consult with their department chair and request a leave of absence in writing from the Registrar using the Request for Leave of Absence Form especially if the recency of credit will be impacted.

Requests for a leave of absence must be approved in advance by the faculty advisor, the program coordinator, and the college dean. Leaves will be granted only under conditions that require the suspension of all activities associated with pursuing the degree including use of university facilities and faculty mentoring/advice. Counting of the time to the completion of the degree pauses when a leave of absence is granted and resumes when the student re-enrolls to continue the program.

A student who is in good standing may petition for a leave of absence of no more than two full academic terms. A leave of absence granted for one full semester may be extended to a maximum of two full semesters by the faculty advisor and program coordinator. A student attending university after an approved leave of absence will not be required to submit an application for readmission. In no case will a leave of absence be extended for more than one year. International students should consult with an advisor in the Office of International Education to find out how a Leave of Absence may impact their stay or re-entry into the U.S.

Please refer to the Graduate Student Handbook (Link from https://www.tamucc.edu/academics/graduate-education/masters-students.php) for further details, including Title IX provisions.

Maximum Course Load

Graduate students may not register for more than 12 hours in a regular semester without the approval of the dean of the college in which they are enrolled. Approval from the academic dean is also required for more than 12 hours of coursework in the combined summer session (not counting Maymester). See the Maximum Course Load section in the catalog.

Repetition of a Course (to Raise a Grade or for Multiple Credit)

A course in which the final grade is C or lower may be repeated for a higher grade. A course in which the final grade is a B may be repeated only with the permission of the Associate Provost. A maximum of two courses may be retaken during graduate study at the University. Each course may be repeated only one time. All grades received for the course will be computed in the grade point average.

A course may be repeated for multiple credit towards graduation only when so designated in the course description and approved by the faculty advisor.

Complete catalog information may be found in the Graduate Academic and Degree Requirements section of the catalog.

Time Limit to Degree

The requirements for a master's degree at Texas A&M University-Corpus Christi must be completed within seven years subsequent to admission to the program. The seven-year period begins the first semester of enrollment and is calculated from the date of degree conferral. Credit that is more than seven years old will not be counted toward a master's degree. Exceptions will require **strong** justification in writing from the student requesting the exception as well as submission of a

revalidation plan. Credits earned at another university are not eligible for an exception. Written approval from the major department chairperson, the dean of the college offering the degree, the Graduate Dean, and the Provost are required. See the revalidation process below.

Revalidation of Courses Beyond Degree Time Limit

Students admitted Fall 2015 or later: Courses listed on the plan of study completed more than ten years prior to graduation are considered dated. The department chair or program coordinator recommends revalidation of dated courses. Revalidation will verify that the student's knowledge in a specific subject area is current and documented. Options for course revalidation include written examinations, a project, paper(s), course retake, or other equally rigorous academic means appropriate to the discipline to determine the student learning outcomes have been met.

Revalidation requests must be submitted on the Graduate Degree Plan Revalidation Request form and accompanied by a written justification, updated degree plan, revalidation plan, and documentation used for revalidation.

All revalidation requests and plans must be approved by the student's faculty advisor, the program coordinator, the department chair, the college dean, and the provost. The student's faculty advisor, department chair, and college dean are responsible for determining whether the student demonstrated sufficient course knowledge necessary for successful course revalidation.

Successfully revalidated courses may be included in the student's plan of study. Failure to follow all designated requirements of the revalidation agreement may result in dismissal from the program. Subsequent requests for revalidation may be considered but will be denied absent a showing of extraordinary hardship. Graduate students will not be permitted to submit more than 12 semester hours of their program's courses for revalidation. Courses beyond the 12- semester hour limit must be retaken. Only courses completed at this university are eligible for revalidation.

Academic Requirements for Graduate Work

(from catalog: https://catalog.tamucc.edu/graduate/academic-degree-requirements/)

Good Standing. Graduate students, including degree-seeking, certificate-seeking, and non-degree-seeking students, are considered in "good academic standing," making satisfactory academic progress, if they maintain a minimum 3.0 cumulative grade point average (GPA) on all TAMU-CC graduate course work and earn a grade of S (Satisfactory), IP (In Progress), or CR (Credit) on all course work that does not affect grade point average. A higher GPA may be required by some programs. In such cases, the higher standard will be substituted for 3.0 in the discussion below.

A cumulative GPA of 3.0 or higher on all graduate coursework completed at Texas A&M University-Corpus Christi is required for graduation. Only grades earned in graduate-level courses at TAMU-CC are used to determine academic standing.

A complete discussion of academic requirements including but not limited to scholastic probation and enforced withdrawal may be found in the Graduate Academic and Degree Requirements section of the catalog. For information regarding the effect of scholastic probation and enforced withdrawal, see the Financial Assistance Suspension Policy in the Tuition, Fees, & Financial Assistance section of the catalog.

Texas 99 Hour Rule

The Texas State Legislature has enacted a rule that provides that students at all state universities with over 99 doctoral hours may be subject to the payment of nonresident tuition. A student will generally be able to study at A&M-Corpus Christi full-time for five complete academic years, including summers, before being affected by the 99-hour rule. For students staying beyond five years, in a number of cases there is still the possibility of a programmatic or individual exemption from the rule. For more information, contact the coordinator of your graduate program.

Academic Integrity

Texas A&M University-Corpus Christi students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, which include but are not limited to illicit possession of examinations or examination materials, falsification, forgery, plagiarism, or collusion in any of these behaviors. All students should familiarize themselves with the full Academic Integrity Policy as well as the processes and procedures used to address violations thereof. You can find additional information in the Academic Integrity section of the catalog. Students can also access University Rules and Procedures 13.02.99.C0.04: Student Academic Misconduct Cases.

Additional Information

Information, policies, and procedures about tuition, fees, financial assistance, scholarships, and other topics important to graduate students can be found in the catalog. In addition to the catalog, web pages for offices and services on campus provide expanded information, forms, and contact names/phone numbers. Some of those webpages include the following:

Graduate Education
Student Financial Assistance
International Education
Scholarships
Assistantships

SECTION V. STEPS OF WORKING ON A THESIS

A thesis must conform to CMSS Program and Texas A&M University – Corpus Christi institutional standards. The following guidelines will help ensure the thesis is completed and submitted appropriately. Consult the Graduate Student Handbook (Link from: https://www.tamucc.edu/academics/graduate-education/masters-students.php) for specific formatting and submission requirements.

Research Prospectus

The CMSS program strives to train all master's students comprehensively including with knowledge in their professional fields as well as training in the methods of research. Students must conduct original research related to CMSS program goals. Many classes will require students to write thesis proposals and/or peer-reviewed publications as part of the graded class assignments

The master's student, along with the student's graduate advisory committee, designs and plans the thesis research project. This plan should be formalized in a "*Prospectus*", a brief two-page document summarizing the motivation, goals and methods of the student's intended research project, as well as the expected benefits or outcomes. The prospectus is a prologue to the formal thesis proposal and should be presented to the graduate advisory committee at an early meeting.

The introduction section of the prospectus should briefly explain the area of interest and scholarly motivation for the research. One or a few clearly stated objectives should be listed. The prospectus should conclude with an approach on how, where, and when the research will be accomplished. The prospectus will be submitted, along with the degree plan, to the College of Science Dean's Office (Academic Advisor), no later than the end of the **second long semester** (fall/spring).

Structure of Thesis Proposal

The proposal should be concise and provide a compelling rationale for the proposed research. The proposal must include a brief but complete synthesis of previous research on the problem, the significance or novelty of the research, and a detailed plan (experimental protocol) for carrying out the research and eventual analysis of the results. The proposal must also include a timeline with distinct milestones to guide the student and the advisory committee in assessing progress, as well as the budget. The proposal should be approved by the advisory committee prior to substantial research.

The proposal must include the following sections, in this order:

1. Title page. See example of a correctly spaced and formatted title page below.
2. Project Summary. Like an abstract, the summary should be a synopsis of the proposed activity suitable for publication and not more than one page in length. It should describe the activities of the project. The summary must clearly address, in separate statements, the two merit review criteria that are used by national science programs: 1) the intellectual merit of the proposed activity; and 2) the broader impacts resulting from the proposed activity.
3. Background & Relevance. This section summarizes the available scientific literature related to the problem or topic and explains why the proposed research is necessary.

4. Purpose, Objectives and Hypotheses. This section explicitly states the purpose of the research project (e.g., to determine what effect sea-level rise has on oyster reef extent and morphology). The purpose should reflect the question(s) that the research hopes to answer, not the method used to conduct the research. The objectives provide the steps in the research (not explicit methods) that will be used to answer the question (e.g., to gather data on oyster reef extent and morphology in areas of rising sea-level). Hypotheses provide the explicit questions and predictions that will be tested in order to answer the larger research question (e.g., the factors affecting the extent and morphology of oyster reefs as sea level changes are …).
5. Study Site. Optional. If field research is planned, then a description of the study area including a map should be included. The study site should be briefly characterized in terms of physical and/or biological attributes.
6. Methods. This section describes in detail the methods of data collection and analysis used to meet each research objective or hypothesis. This is arguably the most important part of the proposal. Be sure and include how and when any necessary permits are obtained.
7. Timeline. The timeline should be a table that includes distinct milestones showing the schedule for both research and academic work. Milestones should include completion of coursework, preliminary examinations, data-gathering for each objective or hypothesis, and analysis of each objective or hypothesis, writing of thesis, submission to committee, and graduation.
8. Budget. The budget should reflect an accurate assessment of the expenses that will be incurred during the research project and by whom they will be paid. Include financial or other support obtained from all sources. Include each relevant item in the budget in the "Methods" section of the proposal. Divide the budget into 4 subsections and present it in tabular form.
    a. Equipment. Include cost figures for each piece of non-expendable equipment that must be purchased to support research. Do not include purchase costs for equipment already available for use at TAMU-CC but make sure that such equipment is operational and available. Obtain permission before using University equipment and expendables.
    b. Expendables. Estimate costs for all supplies, chemicals or other items to be exhausted during the research project. All items currently in stock must be replaced, so include replacement costs. Expendables include items such as traps, microscope slides, test tubes, glassware, aerial photography, and electronic data.
    c. Operational Expenses. Include cost estimates for data collection including travel, boat rental and other expenses. The use of university vehicles and boats requires approval by the Field Trip Coordinator and the Department Chairperson, or the research institute or center director with oversight over that vehicle.
    d. Document Preparation. Include cost estimates for all aspects of preparing the proposal and thesis, including the cost of having the final document bound. These costs are born by the student alone.
9. Budget Justification. This is a brief statement explaining why each element of the budget is necessary to accomplish the research.
10. Literature Cited. This section includes the complete citation for each article referenced in the proposal in the format of the selected Format Journal.

After the proposal is completed, i.e., it is written well and formatted correctly, a draft copy must be submitted to the chair of the graduate advisory committee for approval.

Writing a successful proposal may require many drafts prior to approval by the entire advisory committee. Starting this process early is strongly advised. After the proposal meets the committee chair's approval, each of the remaining committee members should be provided a copy for review. After all requested changes have been made and the committee is satisfied that all aspects of the

proposal are in order, the final thesis proposal must be delivered to the committee chairperson for signature and then to the rest of the committee and the program coordinator for signatures.

Once all signatures are obtained, make copies of the proposal to distribute to all members of the graduate advisory committee, and to the College of Science Dean's Office (Academic Advisor). Students must take this process into account when planning their research schedule.

Format of Thesis Proposal

Make all narrative material of the thesis proposal clearly understandable to the reader through careful, well-organized writing, meaningful figures and tables, and adequate utilization of references. Several publications available in the TAMU-CC library answer specific questions regarding the style of scientific writing, including the Council of Science Editors (CSE) Style Manual, the United States Government Printing Office Style Manual, and others. No corrections of letters or figures should be visible on the final copies.

Prepare the manuscript using styles in a word processor. Styles allow one to reformat the document quickly. The font should be 10 or 12 characters-per-inch (cpi) type size with a plain book-type font such as Helvetica or Times New Roman, not some unusual font. Follow the Format Journal in italicizing or underlining scientific nomenclature, foreign words, abbreviations and titles. When underlining a word, use a continuous underline; do not leave a space in the underline between letters. Separately underline each word of a multiword term, leaving a gap between adjacent words. In general, double-space the thesis proposal and thesis manuscript. The exceptions to this rule are for quotations exceeding six typed lines (inset and single-space these) and footnotes (which should be avoided). Figure and table captions should also be single-spaced. One line should separate a table caption from the table header and two lines should separate any embedded figure or table from text on the same page. Number all pages in the thesis proposal or thesis manuscript except the Title and Approval pages. Number the preliminary pages of the thesis proposal with lower case Roman numerals. The Abstract page is the first numbered page; it follows the Title and Approval pages and is numbered iii. The style and format for all headings and subheadings in the thesis proposal and thesis manuscript should follow the standard practice of the Format Journal. Start each major heading (i.e., Methods, Study Area, Results, Discussion, etc.) on a new page. Subheadings should fall naturally within the text, but should never appear alone as the last line on a page ("orphan"). If a subheading is the last line of text, start it at the beginning of the next page.

Tables and figures, regardless of size, may appear on separate pages or within the text itself. Place them in the manuscript as close as possible to their first reference in the text (generally the page on or immediately following the first reference). Make sure that figures and tables are relevant and useful to the reader, and use as many as are necessary to fully report on the results of research. If a figure or table is relevant, but represents ancillary information or "raw" data, include in an appendix rather than in the main text of the manuscript. If tables or figures are placed in landscape format on a page, the top of the table or figure should be on the left side. Give each table or figure a number and caption, and transcribe these exactly on the List of Tables or List of Figures page; if a figure or table caption is more than one sentence, then put only the first sentence into the list. Make captions as concise as possible, but clearly describe the content of the figure or table. Follow exactly the format and style for figures and tables prescribed by the Format Journal.

Construct tables using the "Table" function found in all word processors. Titles for tables must appear on the same page as the table, and should be placed above the table. Make horizontal rules mimic the Format Journal. Vertical rules should not be used. If a table is more than one page long, there should be no closing line on the first page and the second page of the table should have a caption reading "Table #. Continued." Multi-page tables should always begin on a new page; in other words, the first few lines of a multi-page table should not appear embedded within the text. Use the caption style of the word processing program for figures, which usually places the caption below the figure.

Footnotes should not appear within the regular text of the manuscript (they are permissible as explanatory notes in tables) except in rare circumstances. If they are absolutely necessary and the Format Journal permits their use, follow the journal format exactly. Cite all references to the literature in the text using the name-date system which is the method most widely used in the sciences, e.g., Stilt (2000) or (Heron, 1995; Seagull 1996; Seagull and Plover, 1996). Choose a Format Journal that uses this system. Do not cite sources by number, i.e., (1). If a figure from another author is used or adapted, cite the source in the figure caption. Generally, follow the format in the Format Journal when developing the Literature Cited section. Use the same system of abbreviations, punctuation, underlining, and italics as the Format Journal. There is one exception (mainly applies to chemistry Format Journals): if the Literature Cited section of the Format Journal does not list the title of an article, make sure to include it to enhance the usefulness of the citations to readers.

Format of the Thesis Proposal Title Page

TITLE SHOULD APPEAR IN ALL CAPITALS AND BE CENTERED

a research proposal prepared by YOU A. STUDENT
MONTH, YEAR

for
The Graduate Committee
Coastal and Marine System Science Program
Department of Physical and Environmental Sciences
Texas A&M University-Corpus Christi
Corpus Christi, Texas

Approved:

_____
Dr. A. Palmtree, Chairperson

_____
Dr. B. Waves, Member

_____
Dr. C. Gull, Member

_____
Dr. D. Sand, Member

Format of the Proposal Budget:

Table 1. Proposed budget for thesis research.

Budget Item	Cost			
	TAMUCC	Personal	Other	Total
Salary Monthly (15 months)			*15567.75	15567.75
Equipment Desktop Laptop Microscope	on hand/no cost on hand/no cost	on hand/no cost		
Supplies Petri dishes Microslides Chemicals			60 40 500	60 40 500
Travel Boat/Vehicle (4 trips) Food Hotel	120.00		400.00 **100.00 **200.00	520.00 100.00 200.00
Preparation of Documents Thesis Expenses Publication and reprints	 300.00	 200.00 	 	 200.00 300.00
Total	420.00	740.00	22567.75	24327.75

* Grants to Dr. A. Palmtree.
** Travel award from Elite Program

Also include a section entitled "*Budget Justification"* that describes in detail each line in the budget.

The CMSS Thesis Requirements

Students will complete a study of the accepted standards of scholarly ethics and scientific integrity. The master thesis is a substantial, formal document that argues in defense of a particular subject. A thesis highlights original contributions. Once data collection and analysis are completed, the research should be organized into a meaningful format and explained in a written narrative. The written narrative follows the style and format standard to scientific papers.

Thesis research will not always go according to plans. Students must be prepared to adopt new methods of data collection or analysis if necessary in consultation with the graduate advisory committee. Students should plan to take advantage of any opportunities to pursue side projects, as time and resources permit, to enrich understanding of the research topic.

Formatting guidelines and templates are available from the office of Graduate Education https://www.tamucc.edu/academics/graduate-education/dissertation-thesis.php

CMSS students may choose between two models for organizing the thesis content: 1) the traditional model, and 2) the journal manuscript model. The "traditional" model presents the thesis research content in a single, cohesive manuscript. Information is presented sequentially and no section stands alone as a publishable document. The "journal manuscript" model presents thesis research as one or several discrete article(s), each appropriate for submission to a journal, bound together as the thesis document. In the journal manuscript model, information may be repeated as necessary between articles so that each can stand alone as an academic work. The journal manuscript format must also include an overarching introduction, a summary/conclusions section that brings the entirety of the research into context, and a literature cited section that encompasses the entirety of the manuscript. Regardless of whether the traditional or journal manuscript model is chosen, the entire document must be submitted in one format style. In other words, in the journal manuscript model, even though it is likely that articles will be submitted to several different journals, the entire thesis must be presented in the style of only one journal. Headings and subheadings, punctuation, reference citations, and other details should follow the selected Format Journal guidelines with few exceptions.

When the draft is ready, submit it to the chair of the advisory committee. Submit the draft as if it were the final – make it as perfect as possible with respect to writing and grammar, punctuation and spelling, journal formatting requirements, and with all figures and tables in final format. Be prepared to go through the revision process numerous times before the committee chair is comfortable letting the rest of the committee review the document.

When the committee chair is ready for the document to be submitted to the rest of the committee, electronic copies will be sent out for comments. Ideally, committee members should return the corrected thesis within two weeks of receipt. Students should check with committee members to ensure they have the time to review the document. A final draft delivered to the advisory committee one month prior to the thesis seminar, would allow two weeks before the scheduled final defense/oral examination date for the student to make recommended changes. After the committee has returned the corrected draft, students should review suggested changes with their advisory committee chair, and make the suggested changes, unless the chair directs otherwise. Note: A request to schedule the defense/final examination must be submitted by the published

deadline (https://www.tamucc.edu/academics/registrar/academic-calendar/masters-dates.php) on the appropriate form found at https://www.tamucc.edu/grad-college/forms/index.php (Form B).

Students should be prepared to go through the revision process more than once before the committee members are comfortable signing off on the final document.

Students should be sure to give their advisory committee chair enough time to review the manuscript and leave themselves enough time to make changes. In other words, students should make sure that they have left ample time prior to deadlines for all members to have adequate time to review the document and for all the changes suggested by the committee to be made. **The thesis should be essentially complete before the thesis seminar and final defense/oral examinations.** Any member of the graduate committee can reject the thesis at any stage of the submission and approval process. Rejection of the manuscript can occur for many reasons including (but not limited to):

1. The manuscript does not conform to the required format
2. The manuscript is messy, poorly reproduced, or contains grammatical or spelling errors
3. The manuscript describes scientific data inconsistent with the research project approved in the thesis proposal
4. The paper contains errors, inappropriate analysis of data, erroneous conclusions, or other scientific inaccuracies
5. The paper contains plagiarized work.

After a student has successfully presented the thesis seminar, completed the defense/oral examination, and completed all changes to the thesis manuscript that have been requested by the committee, the Thesis Defense/Final Examination (Form F) report will be electronically routed for signatures and submitted to Graduate Education (https://www.tamucc.edu/academics/graduate-education/forms/index.php).

The CMSS faculty expects students to submit thesis research (in proper format) to scholarly journal(s) for publication. If the advisory committee chair or other person(s) including other faculty or scientists from funding agencies, etc., made a significant contribution to the research or writing of the manuscript to be submitted, then the person should be listed as a co-author on the published article. The student and the advisory committee chair should agree on the order of authorship. Seriously consider co-author status if a person:

1. Supported the work through a grant that was authored by them
2. Did a significant portion of field or laboratory work
3. Contributed materially and intellectually to the research
4. Contributed to the writing

In all cases, acknowledge the chair of the advisory committee, other members of the graduate advisory committee, other people that offered assistance and TAMU-CC in the publication. It is courteous to acknowledge persons, who assisted in any major way including moral support, lab/field assistance, and of course, any source of financial assistance.

Thesis Seminar & Final Defense/Oral Examination

All courses in the plan of study need to be completed with a GPA of 3.0 or greater before the thesis defense/final examination will be scheduled. Once the thesis is completed and approved by the advisory committee, the results of the research must be presented orally and publicly. The thesis defense/final examination must cover, but is not limited to, the thesis. The defense must be scheduled for a minimum of **six weeks** prior to graduation. The seminar should be scheduled and completed prior to the final defense/oral examination. The final defense/oral examination usually takes place immediately following the seminar, but it can be scheduled on a separate day if necessary to accommodate the schedules of committee members.

Subsequent to the thesis defense/final examination, and **only** after all changes to the thesis manuscript requested by the committee have been made, the student will submit an electronic copy of the thesis, no later than **four weeks** prior to graduation, to ProQuest/UMI as a single PDF file (see Graduate Student Handbook for detailed instructions).

Students not completing all requirements of the Final Thesis Defense by the end of the semester, such as turning in an approved final draft after published deadlines, will receive a grade of In Progress (IP). The student must register for the same course in the subsequent semester, paying all the appropriate tuition and fees, to receive a final grade for the course.

After the **Thesis Defense & Final Examination Report** (Form F) is submitted and all requested changes have been made, the thesis can be submitted electronically.

Thesis Seminar

The Thesis Seminar is a formal oral and visually supported presentation of the results of the research or of some pertinent aspect of the research. Although it will generally be longer than a paper presented at a scientific meeting, it should be similar in format and design. The defense should review parts of the thesis including the background and relevance of the research, the methods, the results, and the conclusions. Professional quality visual aids must complement the oral presentation. As a general rule, the oral presentation should last about 30-45 minutes and at least 15 additional minutes should be allowed to answer questions at the end.

Students must prepare and submit a formal announcement of the thesis seminar to their committee chairperson for approval at least **two weeks** prior to the seminar date. It is the student's responsibility to contact each committee member and arrange a time and place for the event. All committee members must attend the seminar either in person or by teleconference. The student is responsible for posting the seminar notice as an e-mail to all appropriate listservs at least one week prior to the seminar date. Email a copy of the seminar notice to the College of Science Dean's Office (Academic Advisor) and CMSS Administrative Assistant.

Final Defense/Oral Examination

The purpose of the final defense and oral examination is to allow advisory committee members to gauge the scope of the student's understanding of the principles and significance of the discipline of the thesis research. It allows a more detailed assessment of specific knowledge as it applies to

the thesis research. The exact format and scope will vary among students depending on both their advisory committee and the nature of their research.

The graduate advisory committee will decide whether a student has passed the final defense and oral examination. Regardless of whether the student passes or fails, the committee will discuss with the student their assessment of the student's performance. If a student fails, the exam may be retaken only once, and only after at least four months have passed.

Format of the Thesis Seminar Notice

(Note: Time, date and room are examples only)

THESIS SEMINAR NOTICE
COASTAL AND MARINE SYSTEM SCIENCE PROGRAM
DEPARTMENT OF PHYSICAL AND ENVIRONMENTAL SCIENCES
TEXAS A&M UNIVERSITY-CORPUS CHRISTI

SUBJECT: Official Title of Your Thesis

SPEAKER: Student's Name

CHAIR: Advisor's Name

COMMITTEE: Committee Members

DATE: [Insert Day, month date, year]

TIME: 0:00 a.m./ p.m.

PLACE: Building
Room

ABSTRACT

The abstract of thesis should appear here (shortened version if necessary). An abstract of 50-200 words length is recommended for inclusion in the Graduate Seminar Notice.

[**NOTE:** Students should post this notice electronically to faculty members and graduate students involved in the CMSS and other graduate programs via the cmss-list, scitech-list, escifac-list, and escistu-list listservs. Ensure an email of the announcement is sent to the College of Science Dean's Office (Academic Advisor) and CMSS Administrative Assistant.]

SECTION VI. APPENDICES

Appendix 1: CMSS Program Application Checklist

- ❑ Complete the Texas Common Application and submit the application fee. Online applications are preferred.
- ❑ Submit an essay of not more than 1000 words describing educational backgrounds, career interests, goals and challenges. Include any relevant supplemental materials such as publications or resumes of relevant experiences, and contacts made with professors in the CMSS program.
- ❑ Request 3 letters of evaluation/recommendation.
  - You should request evaluations/recommendations from individuals who are familiar with your academic achievement and potential and provide them with the required evaluation forms.
  - If you have been out of school for a number of years and are unable to contact former professors, you may request evaluations/recommendations from people such as employers who are familiar with you and who can comment on your potential to succeed in the program.
  - Completed evaluation/recommendations should be signed over the flap of the envelope by the person completing the form/letter and be mailed directly to Graduate Education.
- ❑ Request official transcripts documenting all senior-level post-secondary institutions you attended. Transcripts must be sent directly to Graduate Education. An official statement of the award of the degree or diploma is required for each degree completed.
- ❑ Request that the required test scores (GRE and/or TOEFL) be sent directly from the Educational Testing Service to Graduate Education (Code 6849)
  - GRE and TOEFL scores must be not more than 5 and 2 years old, respectively
  - International graduate students seeking assistantships must also obtain "English Proficiency Certification"
- ❑ Apply separately to College of S&E for financial assistance.
- ❑ Priority deadlines are:

Student Type	Fall Semester	Spring Semester	Summer Semester
Domestic Students	December 1	August 1	December 1
International Students	December 1	June 1	December 1

Appendix 2: CMSS MS Program First-Year Checklist

- ❑ Meet with CMSS Program Coordinator prior to enrolling for first semester classes
- ❑ Form Graduate Advisory Committee (GAC) by end of first semester
    - Speak with individual faculty about research interests
    - Committee must include at least 3 CMSS PhD. Faculty
    - Decide on a primary advisor (Committee Chair)
    - Form and meet GAC *no later than* end of second semester
- ❑ Prepare the Tentative Degree Plan with the GAC no later than by end of second semester
    - Leveling coursework
    - Elective coursework
    - Thesis topic
    - Formulate Research Prospectus
- ❑ Meet GAC at least annually to update progress

Each time an item is checked off this list, send an email with the date completed to the CMSS Administrative Assistant.

Appendix 3: CMSS MS Program Degree Requirements Checklist

I. Coursework

- ❑ Leveling coursework (if necessary) as specified by GAC
- ❑ Tentative Degree Plan and Research Prospectus approved by Graduate Education and copy to the College of Science Dean's Office (Academic Advisor) by end of second semester
  - Minimum 36 credit hours
  - 24 hrs Core Curriculum, including CMSS 6312, 12 hrs of core courses, and 9 research hours
  - 3.0 minimum GPA
  - Research Prospectus (2 pages) developed with GAC
  - Final Degree Plan for signature approval to Dept. Chair, College Dean, and Graduate Education no later than before census day (12th class day) of the semester prior to the graduating term.
  - Deadline to apply for graduation is the last day of classes in the semester prior to graduation.

II. Thesis Proposal

- ❑ Independent, detailed, original, systems-based inquiry
- ❑ Research Prospectus presented to committee and submitted to Graduate Education by end of the second semester (2 pages)
- ❑ Thesis Research Proposal
  - Modified from Prospectus with GAC input
  - Submit draft to Committee Chair for approval
  - Present to GAC for approval signatures
  - Signed version submitted to College Dean; Copies to College Advisor, CMSS Administrative Assistant, and GAC members
  - Should be approved by end of first year of graduate study

III. Thesis

- ❑ Data collection and analysis completed
- ❑ Choose format and prepare according to guidelines
  - Multiple iterations of editing
  - With Chair approval, provide copies to GAC *at least* 1 month prior to final defense
  - Committee returns corrected versions within 2 weeks
  - Review and incorporate suggested changes along with Chair
  - Additional review by GAC may be required
- ❑ Submit final corrected version of Thesis to Graduate Education following successful defense
  - See Graduate Student Handbook for instructions
- ❑ Note: Completion of the CMSS MS is driven by the thesis as a product of research, rather than by external factors or commitments

VI. Thesis Defense

- ❑ Must be registered for credit for semester in which the final defense takes place
- ❑ Apply for graduation in College of Science Dean's Office (Academic Advisor) by published deadline. The student must complete all requirements for the degree at least three weeks prior to the end of the semester in which the degree will be conferred.
- ❑ Contact GAC to schedule Thesis Seminar and Final Defense
  - Must be held at least six weeks prior to graduation
- ❑ Submit formal seminar announcement to committee chair at least 2 weeks in advance
- ❑ Schedule rooms for seminar and defense
- ❑ Post announcement to relevant Listservs at least 1 week in advance
- ❑ Email copy to College of Science Dean's Office (Academic Advisor)
- ❑ Present Thesis Seminar and stand for the Final Defense
- ❑ Complete all requirements for the degree at least three weeks prior to the end of the semester in which the degree will be conferred.

Notes:

Tracking progress toward the degree is very important and the responsibility of the CMSS Program Coordinator. Each time the student has accomplished a milestone on this list, the student should send an email with the date completed to the CMSS Administrative Assistant.

Appendix 4: CMSS MS Program Timeline

	Item	Timeline
☐	Degree Plan	Before completing 50% of required program SCH .
☐	**Form A** – Thesis Advisory Committee Appointment	Before start of data collection/creative activity
☐	**Form B** – Preliminary Agreement to Schedule the Thesis Defense/Final Examination	Five (5) days prior to defense
☐	**Form C** – Thesis Defense & Written Thesis Report - **Form should not be signed until student has passed the defense AND made all necessary thesis changes requested by the committee.**	Two (2) weeks prior to Graduation
☐	**Form D –** Thesis Committee Member Change Request	As needed
☐	**Form I** – Graduate Degree Plan Exceptions Form	As soon as needed for exception
☐	**Form J –** Graduate Degree Plan Revalidation Request	As needed
☐	**Form K –** Request for a Leave of Absence	As needed, prior to requested leave period
☐	**Final Version of Thesis Uploaded to ProQuest** https://www.etdadmin.com/main/home?siteId=246 - Thesis submission deadlines can be found online at: https://www.tamucc.edu/academics/registrar/academic-calendar/masters-dates.php Note: Title Page, Committee Member Page, and Copyright Page templates can be found online at https://www.tamucc.edu/academics/graduate-education/masters-students.php	2 weeks prior to Graduation