

# RIVER-COASTAL SCIENCE AND ENGINEERING, MS (NON-RESIDENTIAL)

## Overview

The River-Coastal Science and Engineering program is an effort by faculty and students to understand a key component of the Earth system—the linked environments of river basins, deltaic river mouths, and coastal ocean systems. Much of our focus surrounds the nexus issue of water: water exerts a strong control over landform evolution and ecosystem health, and is a priority human need for agriculture, industry, and health.

This 30 credit degree is identical in requirements to the Resident Master of Science degree, but is designed to allow professionals to acquire the degree remotely while employed. This degree also requires a thesis, but it is anticipated that the thesis committee and topic would be designed as an offshoot of the student's employment. We envision that most students who pursue this degree will have acquired the Graduate Certificate as an intermediate step, which provides an opportunity for the student to arrange their funding through the employer and to design a thesis project that fits their individual work-life issues.

## Requirements

All students must complete 24 graduate credit hours in order to obtain the degree.

- M.S. students can transfer up to 12 credit hours from previous graduate-level coursework to the degree. The RCSE Graduate Advisor and Department Chair must approve all transfer credits.
- Students hoping to transfer graduate credits should prepare and submit the paperwork at the start of their second semester at Tulane. SSE will only transfer credits when the student has completed one semester (it is at that point that a Tulane transcript is available).
- Academic graduate electives from other departments may be applied to the degree up to a limit of 9 credit hours. All other courses must originate from RCSE. If a class is not on the approved list, a student may petition the Graduate Advisor for it to be accepted as an elective.
- Note that thesis MS students typically do NOT register for any credits over the summer (Ph.D. students must due to health insurance reasons, but not MS students).
- Unless students have been exposed previously to the material offered, thesis committees will strongly urge students to take two introductory technical courses offered by the RCSE, RCSE 6800 Intro to River Science & Eng (3 c.h.) and RCSE 6802 Intro to Coastal Science and Engineering.

Course ID	Title	Credits
RCSE 6010	Water Resources Engineering II (offered Fall semester)	3
RCSE 6030	Water Resources Engineering III (offered Spring semester, even years)	3
RCSE 6040	Coastal Marine Geology (offered Fall semester, odd years)	3
RCSE 6660	Special Topics (Offered periodically)	1-3
RCSE 6710	Open Channel Flow (offered Spring semester, odd years)	3
RCSE 6800	Intro to River Science & Eng (offered every Spring semester)	3
RCSE 6802	Introduction to Coastal Science and Engineering (offered every Fall semester)	3
RCSE 6810	River and Stream Restoration (offered Spring semester, even years)	3
RCSE 6820	Introduction to River-Coastal Hydrologic and Hydraulic Modeling (offered Spring semester, even years)	3
RCSE 6830	River Mechanics & Management (offered Fall semester, even years)	3
RCSE 6840	Methods in River Sampling (offered Spring semester, odd years)	3
RCSE 6850	Estuarine Processes (offered Spring semester, odd years)	3
RCSE 7100	Seminar in River Coastal Science and Engineering (Every semester)	1
RCSE 6860	Environmental Data Analysis in the Anthropocene (offered Spring semester, even years)	3
RCSE 6870	Hydroclimatology (offered Fall semester, odd years)	3
RCSE 6865	Sea Level Rise (offered Spring semester, odd years)	3
RCSE 6875	Ecohydrology (offered Fall semester, even years)	3
RCSE 6900	Independent Study (Every semester)	1-3
RCSE 9980	Masters Research	3

M.S. students must enroll in three semesters of the 1 credit Seminar course (RCSE7010). The goal of this is to expose students to state-of-the-art research topics and methodologies in concert with the departmental seminar series. They must also enroll in the 3 credit Research and Technical

Writing course (RCSE 7020) that is offered each Fall. Generally students take this class in their third semester, but may be later for non-residential students.

Additionally, students must enroll in 3 credits of Masters Research (RCSE9980) over two successive semesters (6 credits total). The student may register for more Masters Research credits if desired in previous semesters; however, these credits do not count toward the 24 course credits necessary for the degree. Masters Research credits are an additional and different type of credit, and they bring the total credits up to  $24+6=30$ . Note that if all other credit requirements are met, the student can enroll in ONLY 3 hrs of Masters Research to maintain enrollment, i.e. this maintains full time enrollment.