

Master of Science in Exercise Science

About This Program

The Master's of Science in Exercise Science provides advanced training. Students will interact with world-renowned faculty at the forefront of research and discovery, to accomplish three distinct objectives:

1. Provide students with the academic and research skills needed for doctoral study in integrative and applied physiology, movement and rehabilitation sciences, or physical education.
2. Prepare students for employment in clinically oriented environments, associated with physical activity and rehabilitation such as cardiac rehabilitation, strength and conditioning, or sports medicine.
3. Enhance the theoretical background and skills of students seeking employment in Physical and Health Education.

Students can choose to (1) work directly with a faculty member to complete a manuscript project or a thesis or (2) complete an internship during the final semester in a clinical environment.

Competencies

1. Research study design: students will demonstrate proficiency in designing a research study to test a specific hypothesis.
2. Development and execution of an appropriate statistical approach: students will demonstrate the ability to choose, justify, and conduct the appropriate statistical procedure based on a given research design and study hypothesis.
3. Research presentation skills: students will deliver oral reports based on research involving peer-reviewed articles or other lab or classroom based projects.
4. Ability to analyze factors associated with human motion in walking, running, and jumping: students will demonstrate proficiency in their ability to assess the impact of various factors (age, health status, etc.) on human motion, in walking, running, and jumping.
5. Understanding the impact and importance of physical activity for health and disease prevention: students will demonstrate proficiency in their ability to evaluate critically and understand the function of the human body at rest and during exercise; in addition, students will gain proficiency in understanding the health benefits of exercise and its impact on disease prevention.

Admissions Criteria

- For all applications, the department factors in all components of the application into consideration.
- Course Prerequisites: Listed below are UTA course numbers. Equivalent courses at other institutions of higher education will also be considered. To be considered for admission, students must receive a grade of C or better in these (or their respective equivalent) courses.
 - BIOL 2457 HUMAN ANATOMY AND PHYSIOLOGY I
 - BIOL 2458 HUMAN ANATOMY AND PHYSIOLOGY II
 - MATH 1302 COLLEGE ALGEBRA
 - KINE 3300 FUNCTIONAL ANATOMY
 - KINE 3401 BIOMECHANICS OF HUMAN MOVEMENT
 - KINE 3415 PHYSIOLOGY OF EXERCISE
- Undergraduate degree from an accredited institution or an equivalent foreign institution.
- GPA of 3.0 for undergraduate degree or in any previous graduate program.
- A statement of purpose, (maximum of 3 pages) is also required upon submission of the application. This should highlight the previous achievements and experiences of the applicant that have led to the decision to consider a Master's degree in Exercise Science as well as the previous achievements that would qualify the applicant for admission into this program. The statement should also include future career goals following obtaining a Master's degree in Exercise Science.
- Students who do not meet the requirements for unconditional admission (see below) or in the event that additional information is required to make a decision, we may ask the applicant for the name and contact information of 2 references who are familiar with the applicant's academic preparation and readiness to pursue master's studies.
- All international students must meet the minimum requirements for English Language proficiency as outlined in the UTA University Catalog [UTA Catalog - English Proficiency](https://catalog.uta.edu/archives/2025-2026/academicregulations/admissions/graduate/). (<https://catalog.uta.edu/archives/2025-2026/academicregulations/admissions/graduate/>)

UNCONDITIONAL ADMISSION

Applicant meets the minimal grade requirements on the prerequisite courses, meets the minimum GPA standards, has a degree from an accredited U.S. or foreign institution, and submits a personal statement that clearly outlines the requested experiences and career goals of the applicant. All international students must meet the minimum requirements for English Language proficiency as outlined in the UTA University Catalog [UTA Catalog - English Proficiency](https://catalog.uta.edu/archives/2025-2026/academicregulations/admissions/graduate/). (<https://catalog.uta.edu/archives/2025-2026/academicregulations/admissions/graduate/>)

PROBATIONARY ADMISSION

Applicants must have received an undergraduate degree from an accredited US or Foreign Institution. All international students must meet the minimum requirements for English Language proficiency as outlined in the UTA University Catalog [UTA Catalog - English Proficiency](https://catalog.uta.edu/archives/2025-2026/academicregulations/admissions/graduate/). (<https://catalog.uta.edu/archives/2025-2026/academicregulations/admissions/graduate/>)

In addition, the following circumstances may meet the requirements for probationary admission:

- The applicant meets the minimum grade requirements on at least 3 of the 6 prerequisite courses and has a GPA of 3.0 or better.
- The applicant meets the minimum grade requirements on at least 4 of the 6 prerequisite courses and has a GPA of 2.75 or better.

In both cases the following additional criteria will also be considered by the Graduate Studies Committee.

- Professionally relevant experience as outlined in the "Statement of Purpose"
- Readiness for academic preparation and the pursuit of master's studies as noted by the 2 references (in the event that they are contacted).
- Additional writing samples and/or information may be requested.
- Applicants admitted on probation will be required to maintain a B or better average during the first 12 hours of graduate study.

Note: The Master of Science in Exercise Science is a competitive program with limited space. Therefore, while meeting standards for unconditional or probationary admission, significantly improves your chance for acceptance into the program, they do not guarantee acceptance.

DEFERRED ADMISSION

A deferred admission decision may be granted when a file is incomplete.

DENIAL OF ADMISSION

A candidate may be denied admission in the MS in Exercise Science degree program if he/she does not have an undergraduate degree from an accredited U.S. or Foreign Institution. In addition, the applicant may be denied admission if they do not meet either of the conditions listed for unconditional or probationary admission or the information gained from the references does not suggest adequate readiness or academic preparation to succeed in the program

GRADUATE ASSISTANTSHIPS

The Department of Kinesiology and faculty offers financial assistance to MS students. Assistantships are contingent upon prior acceptance to the Graduate School and are limited and thus offered on a competitive basis. Graduate Assistant applicant evaluation begins on January 1 and continues until all positions are filled. Please direct all inquiries to the graduate program director.

Curriculum

All students are required to complete 30 hours for the master's degree. All students accepted into the Master of Science in Exercise Science will take a core of 15-semester hours of required KINE courses. In addition, all students are required to complete one of the following in their last semester; KINE 5389: Research Manuscript Submission (3 hours), KINE 5689: Thesis (6 hours), or KINE 5389 Physiology of Exercise Internship (3 hours). The remaining required hours will be completed through various course electives.

All MS students are initially accepted on the non-thesis track. The student's academic advisor within the Department of Kinesiology will review transcripts of prospective students to determine what prerequisites are needed prior to enrollment in courses within the proposed program. If deficiencies are identified, a pre-program of study designed to prepare the student for graduate course prerequisites will be written and signed by the prospective student and the student's graduate advisor.

Foundations

KINE 5300	RESEARCH METHODS	3
KINE 5305	APPLIED STATISTICAL PRINCIPLES IN KINESIOLOGY	3
KINE 5320	ADVANCED PHYSIOLOGY OF EXERCISE	3
KINE 5323	MOTOR CONTROL AND LEARNING	3
KINE 5350	APPLIED BIOMECHANICS	3

Electives

Select three to four courses from the following to complete a minimum of 30 hours in the degree. 12

KINE 5322	METABOLISM & EXERCISE BIOCHEMISTRY
KINE 5326	CARDIOCIRCULATORY PHYSIOLOGY OF EXERCISE
KINE 5327	PULMONARY PHYSIOLOGY OF EXERCISE
KINE 5328	NEUROMUSCULAR PHYSIOLOGY OF EXERCISE
KINE 5331	OBESITY & WEIGHT MANAGEMENT

KINE 5345	SPORT NUTRITION
KINE 5360	FUNDAMENTAL PRINCIPLES OF INTEGRATIVE PHYSIOLOGY
KINE 5390	SPECIAL TOPICS IN KINESIOLOGY
KINE 5393	PHYSIOLOGY OF EXERCISE INTERNSHIP
KINE 5394	RESEARCH IN KINESIOLOGY
KINE 5340	ENVIRONMENTAL PHYSIOLOGY

Thesis/Research Options

Select one of the following (students selecting thesis will take three electives, others will take four):

3

KINE 5389	RESEARCH MANUSCRIPT SUBMISSION
KINE 5393	PHYSIOLOGY OF EXERCISE INTERNSHIP
KINE 5698	THESIS

Total Hours**30**

Program Completion

Students must complete a minimum of 30 hours to complete the degree including being enrolled in the one of the following courses in the final semester:

- KINE 5389 RESEARCH MANUSCRIPT SUBMISSION
- KINE 5698 THESIS
- KINE 5393 PHYSIOLOGY OF EXERCISE INTERNSHIP

Advising Resources

Graduate students in Kinesiology are advised by program faculty. They are encouraged to reach out to their faculty for any questions or concerns regarding their academic progression.

Location:

147 Maverick Activities Center

Email:

kinesiology@uta.edu

Phone:

817-272-3288

Web:

Kinesiology Advising Information (<https://www.uta.edu/academics/schools-colleges/conhi/student-resources/advising-kinesiology/>)