# M.S.E.S. in Exercise Science

## Description
The M.S. in exercise science prepares students for careers in fitness and allied health and research. The degree also prepares students for advanced study at the doctoral (Ph.D.) level.

## Minimum Total Credit Hours: 32

## Course Requirements
For the M.S. in exercise science, a minimum of 33 semester hours of graduate study is required. Requirements for the M.S. in exercise science are a minimum of 12 hours from the exercise science core curriculum, 6 hours of supporting curriculum, 6 hours of research design and statistics, a minimum of 3 hours of electives, and either 6 hours of thesis or 9 hours of internship or 6 additional hours of adviser-approved elective course work as the capstone learning experience.

### Core Curriculum (12 hours)
- **ES 512-Foundations of Biomechanics** *(3)*
- **ES 611-Exercise Physiology I** *(3)*
- **ES 614-Cardiovascular Physiology** *(3)*
- **ES 632-Advanced Structural Kinesiology** *(3)*

### Supporting Curriculum (6 hours)
- **ES 514-Applied EMG** *(3)*
- **ES 609-Motor Behavior** *(3)*
- **ES 608-Methods and Procedures of Graded Exercise Testing (core)** *(3)*
- **ES 612-Instrumentation and Analysis in Biomechanics** *(3)*
- **ES 613-Health Aspects of Physical Activity** *(3)*
- **ES 615-Physiological Aspects of Aging** *(3)*
- **ES 616-Exercise Physiology II** *(3)*
- **ES 618-Advanced Muscle Physiology** *(3)*
- **ES 620-Selected Topics in Exercise Science** *(3)*
- **ES 644-Control of Human Movement** *(3)*
- **ES 548-Biomechanics of Injury** *(3)*

### Electives (3-9 hours)
- **ES 651-Advanced Individual Study** *(3)*
- **ES 652-Advanced Individual Study** *(3)*
- Any non-core course (adviser-approved) *(3)*

### Research and Statistics (6 hours)
- **ES 625-Research Design and Evaluation** *(3)*
- **ES 652-Statistics (adviser-approved)** *(3)*

### Capstone Learning Requirement (6 or 9 hours)
- **ES 610-Internship in Exercise Science** *(9)*
- **ES 697-Thesis** *(6)*
- Adviser-approved elective course work *(6)*

*Requires completion of equivalent undergraduate level course or approval of instructor.