

## 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)            |
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<sup>\*</sup>Requires completion of equivalent undergraduate level course or approval of instructor.

