# MASTER OF SCIENCE (M.S.), MAJOR IN ATHLETIC TRAINING

## Degree Program

The master of science (M.S.) with a major in athletic training is designed as an advanced post-professional athletic training curriculum for the board-certified athletic trainer. The graduate student in athletic training may choose from either the thesis or the non-thesis option.

As background prerequisites, an athletic training major is expected to have graduated from an academic institution that is accredited by the Commission on Accreditation of Athletic Training Education (CAATE) or presently be certified through the Board of Certification, Inc.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the 2017-2018 academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the 2017-2018 academic year can be found on the program’s web page (http://gradcollege.txstate.edu/programs). International students should review the International Admission Documents (http://mycatalog.txstate.edu/graduate/admission-documents/international) section of the catalog for additional requirements.

- completed online ApplyTexas application
- $40 nonrefundable application fee
- $50 nonrefundable international evaluation fee (if applicable)
- baccalaureate degree from a university with regional and CAATE (Commission on Accreditation of Athletic Training Education) accreditations
- official transcripts required from each four-year institution where course credit was granted
- minimum 3.0 GPA in your last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE scores not required
- certification showing you are a certified athletic trainer or eligible for the certification exam (especially if your degree is not from a CAATE-accredited institution)
- research interest form
- resume/CV
- statement of purpose
- three forms of recommendation

## TOEFL or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official IELTS (academic) scores required with a 6.5 overall and
  - minimum individual module scores of 6.0

This program does not offer admission if the scores above are not met.

## Degree Requirements

The graduate student in athletic training may choose from either the thesis (34 hours) or the non-thesis (37 hours) option.

### Non-thesis Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESS 5346</td>
<td>Research Methods in Health and Human Performance</td>
<td>3</td>
</tr>
<tr>
<td>AT 5312</td>
<td>Evidence-Based Practice in Sports Medicine</td>
<td>3</td>
</tr>
<tr>
<td>AT 5310</td>
<td>Proprioception and Neuromuscular Control in Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>AT 5311</td>
<td>Biomechanics of Musculoskeletal Injury</td>
<td>3</td>
</tr>
<tr>
<td>AT 5318</td>
<td>Therapeutic Evaluation and Intervention</td>
<td>3</td>
</tr>
<tr>
<td>AT 5307</td>
<td>Bioenergetics of Exercise and Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>AT 5308</td>
<td>Therapeutic Exercise and Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>PT 5400</td>
<td>Human Structure and Function</td>
<td>4</td>
</tr>
<tr>
<td>ESS 5356</td>
<td>Applied Statistics in Health and Human Performance</td>
<td>3</td>
</tr>
<tr>
<td>AT 5347</td>
<td>Independent Study in Athletic Training</td>
<td>3</td>
</tr>
</tbody>
</table>

### Electives

Choose 6 hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESS 5304</td>
<td>Motor Learning and Performance</td>
</tr>
<tr>
<td>ESS 5305</td>
<td>Advanced Fitness Assessment and Exercise Prescription</td>
</tr>
<tr>
<td>ESS 5306</td>
<td>Advanced Exercise Physiology</td>
</tr>
<tr>
<td>ESS 5307</td>
<td>Advanced Resistance Training and Conditioning</td>
</tr>
<tr>
<td>ESS 5309</td>
<td>Biomechanics for Exercise &amp; Sports Science</td>
</tr>
<tr>
<td>ESS 5311</td>
<td>Applied Neuromuscular and Skeletal Muscle Physiology</td>
</tr>
<tr>
<td>NUTR 5364</td>
<td>The Science of Nutrition and Exercise</td>
</tr>
<tr>
<td>PT 7231</td>
<td>Anatomy II – Spine</td>
</tr>
<tr>
<td>PT 7241</td>
<td>Anatomy III - Lower Extremity</td>
</tr>
<tr>
<td>PT 7251</td>
<td>Anatomy IV - Upper Extremity</td>
</tr>
<tr>
<td>PT 7363</td>
<td>Body Systems III – Cardiovascular/Pulmonary System</td>
</tr>
</tbody>
</table>

**Total Hours** 37

### Thesis Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESS 5346</td>
<td>Research Methods in Health and Human Performance</td>
<td>3</td>
</tr>
<tr>
<td>AT 5312</td>
<td>Evidence-Based Practice in Sports Medicine</td>
<td>3</td>
</tr>
<tr>
<td>AT 5310</td>
<td>Proprioception and Neuromuscular Control in Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>AT 5311</td>
<td>Biomechanics of Musculoskeletal Injury</td>
<td>3</td>
</tr>
<tr>
<td>AT 5318</td>
<td>Therapeutic Evaluation and Intervention</td>
<td>3</td>
</tr>
<tr>
<td>AT 5307</td>
<td>Bioenergetics of Exercise and Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>AT 5308</td>
<td>Therapeutic Exercise and Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>PT 5400</td>
<td>Human Structure and Function</td>
<td>4</td>
</tr>
<tr>
<td>ESS 5356</td>
<td>Applied Statistics in Health and Human Performance</td>
<td>3</td>
</tr>
</tbody>
</table>

**Thesis**
If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student’s capability for research and independent thought. Preparation of the thesis must be in conformity with the Graduate College Guide to Preparing and Submitting a Thesis or Dissertation.

**Thesis Proposal**

The student must submit an official Thesis Proposal Form (http://www.gradcollege.txstate.edu/forms.html) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members’ signatures, the graduate advisor’s signature if required by the program and the department chair’s signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student’s enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

**Thesis Committee**

The thesis committee must be composed of a minimum of three approved graduate faculty members.

**Thesis Enrollment and Credit**

The completion of a minimum of six hours of thesis enrollment is required. For a student’s initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses in their field, e.g., ENG 5399A, ENG 5199B, ENG 5299B, ENG 5399B, ENG 5599B, and ENG 5999B, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

A student will be required to enroll in and pay the fee for at least one hour of the thesis course during any term in which the student will receive thesis supervision or guidance and/or in which the student is using university resources. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B. The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit (“CR”) will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

**Fee Reduction**

A master’s degree candidate for graduation may be eligible for a one-time fee reduction under V.T.C.A. Education Code, Section 54.054. Please refer to the section titled Fee Reduction in the Additional Fees and Expenses chapter of this catalog for more information.

**Thesis Deadlines and Approval Process**

Thesis deadlines are posted on The Graduate College (http://www.gradcollege.txstate.edu) website under “Current Students.” The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student’s embargo selection). NOTE: MFA theses will have a permanent embargo and will never be published to Digital Collections.

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student’s progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university’s or institution’s email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university’s licensed signature platform.

Scanned, faxed, or email communications must be submitted to The Graduate College together with the form containing original signatures.
No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Health and Human Performance: AT

Courses Offered

**Athletic Training (AT)**

**AT 5101. Graduate Assistant Development.**
This course is required of all graduate assistants and provides regular in-service and planned periodic evaluations of instructional responsibilities. Graduate assistants are required to register for this course in the spring semester of their employment. This course does not earn graduate degree credit. Graded on a credit (CR), no-credit (F) basis

1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.

**Course Attribute(s):** Graduate Assistantship

**Grade Mode:** Leveling/Assistantships

**AT 5199B. Thesis.**
This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis

1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.

**Grade Mode:** Credit/No Credit

**AT 5201. Graduate Assistant Development.**
This course is required of all graduate assistants and provides in-service and planned periodic evaluations of instructional responsibilities. Graduate assistants are required to register for this course in the fall semester of their employment. This course does not earn graduate degree credit. Graded on a credit (CR), no-credit (F) basis

2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.

**Course Attribute(s):** Graduate Assistantship

**Grade Mode:** Leveling/Assistantships

**AT 5299B. Thesis.**
This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis

2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.

**Grade Mode:** Credit/No Credit

**AT 5302. Special Topics in Athletic Training.**
This course is designed to educate students in the scientific process and develop an in-depth understanding of the research process in Athletic Training

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

**Grade Mode:** Standard Letter

**AT 5303. Seminar in Athletic Training.**
Current trends in athletic and physical education concerning the care and prevention of injuries with special emphasis on therapeutic and rehabilitation techniques. Taping and bandaging will be practiced in a laboratory situation

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

**Grade Mode:** Standard Letter

**AT 5307. Bioenergetics of Exercise and Rehabilitation.**
This course is designed to provide both a theoretical and clinical basis for the use of therapeutic exercise in physiological basis of muscular, respiratory, cardiovascular, and nervous systems in the rehabilitation of all athletic injuries. Must be admitted to the MS in Athletic Training Program or instructor approval required

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

**Grade Mode:** Standard Letter

**AT 5308. Therapeutic Exercise and Rehabilitation.**
This course is designed to provide both a theoretical and clinical basis for the use of therapeutic exercise in the rehabilitation setting, as well as to impart knowledge pertaining to the physiological effects, indications, contraindications and applications of therapeutic exercise in the rehabilitation of all athletic injuries. Must be admitted to the M.S. in Athletic Training Program

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

**Grade Mode:** Standard Letter

**AT 5310. Proprioception and Neuromuscular Control in Rehabilitation.**
This course provides for an advanced study of the concepts, theories, and current research related to proprioception, postural stability, and neuromuscular control as applied to the prevention, diagnosis, and clinical management of sport-related musculoskeletal injuries and concussions. Must be admitted to the M.S. in Athletic Training Program or instructor approval required

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

**Grade Mode:** Standard Letter

**AT 5311. Biomechanics of Musculoskeletal Injury.**
This course focuses on the application of biomechanical principles to the pathoetiology, diagnosis, and physiological capacity for healing of injuries to bone, ligament, tendon, cartilage, and other human tissues, with an emphasis on current injury research. Must be admitted to the M.S. in Athletic Training Program or instructor approval required

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

**Grade Mode:** Standard Letter

**AT 5312. Evidence-Based Practice in Sports Medicine.**
This course is designed to provide students with advanced study in the elements of evidence-based practice in sports medicine with focus on the role of accessing, retrieving, and critically appraising evidence to answer clinical questions in patient care. Must be admitted to the M.S. in Athletic Training Program or instructor approval required. Prerequisite: ESS 5346

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

**Grade Mode:** Standard Letter

**AT 5318. Therapeutic Evaluation and Intervention.**
This course explores the scientific bases of therapeutic musculoskeletal exercise and neuromuscular evaluative techniques in the rehabilitation process. Must be admitted to the M.S. in Athletic Training Program

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

**Grade Mode:** Standard Letter

**AT 5347. Independent Study in Athletic Training.**
This course may be taken by a student who desires to work on a research problem or investigation in Athletic Training. The student gathers and analyzes pertinent data and submits a report of the results of the research. Repeatable once for credit. Prerequisite: ESS 5346

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

**Grade Mode:** Standard Letter
AT 5399A. Thesis.
This course represents a student’s initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in AT 5399B. Graded on a credit (CR), progress (PR), no credit (F) basis
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Credit/No Credit

AT 5399B. Thesis.
This course represents a student’s continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Credit/No Credit

AT 5599B. Thesis.
This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis
5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Credit/No Credit

AT 5999B. Thesis.
This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis
9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Credit/No Credit