

MASTER OF SCIENCE IN KINESIOLOGY (BIOMECHANICS AND MOTOR BEHAVIOR)

Web Site: <https://twu.edu/kinesiology/graduate-programs/biomechanics/>

Graduate courses in the School of Health Promotion and Kinesiology are designed to provide qualified individuals with the opportunity to pursue advanced study beyond the baccalaureate level. Biomechanics, exercise physiology, biochemistry, and motor behavior/pedagogy laboratories have been dedicated specifically to teaching and research.

Marketable Skills

Defined by the Texas Higher Education Coordinating Board's 60x30 Strategic Plan (<http://www.60x30tx.com/>) as, "Those skills valued by employers that can be applied in a variety of work settings, including interpersonal, cognitive, and applied skills areas. These skills can be either primary or complementary to a major and are acquired by students through education, including curricular, co-curricular, and extracurricular activities."

1. Accurately apply knowledge to the betterment of the field of Kinesiology.
2. Assess needs in the Kinesiology field and recommend appropriate solutions.

Admissions

All students must meet the University requirements as outlined in the Admission to the TWU Graduate School (<http://catalog.twu.edu/graduate/graduate-school/admission-graduate-school/>) section of the catalog.

This academic program may have additional admission criteria that must also be completed as outlined on the program's website.

Degree Requirements

Prerequisites

- Anatomy (Functional Anatomy)
- Kinesiology & Biomechanics
- Motor Learning & Control
- Exercise Physiology

Prerequisite courses may be taken during the program but will not be counted toward the degree.

Total Semester Credit Hours Required

Thesis Option: 30 semester credit hours (SCH)

Publishable Manuscript Option: 36 semester credit hours (SCH)

Thesis Option (30 SCH)

Code	Title	SCHs
Kinesiology Core		
6		
KINS 5023	Methods of Research	

KINS 5033	Applied Statistical Principles	
Biomechanics & Motor Behavior Emphasis		12
KINS 5513	Mechanical Analysis of Human Motion	
KINS 6563	Human Motor Control	
KINS 6623	Biomechanical Analysis I: Motion Analysis	
KINS 6643	Biomechanical Analysis II: Data Acquisition and Instrumentation	
Biomechanics & Motor Behavior Electives		6
Select 6 SCH in consultation with advisor		
KINS 5903	Special Topics	
KINS 5813	Research in Kinesiology	
KINS 5913	Independent Study	
KINS 6523	Advanced Biomechanics	
KINS 6573	Motor Learning and Performance	
MATH 5913	Independent Study	
Culminating Experience		
KINS 5983	Thesis	3
KINS 5993	Thesis	3
Total SCHs		30

Publishable Manuscript Option (36 SCH)

Code	Title	SCHs
Kinesiology Core		6
KINS 5023	Methods of Research	
KINS 5033	Applied Statistical Principles	
Biomechanics & Motor Behavior Emphasis		15
KINS 5513	Mechanical Analysis of Human Motion	
KINS 6523	Advanced Biomechanics	
KINS 6563	Human Motor Control	
KINS 6623	Biomechanical Analysis I: Motion Analysis	
KINS 6643	Biomechanical Analysis II: Data Acquisition and Instrumentation	
Biomechanics & Motor Behavior Electives		12
Select 12 SCH in consultation with advisor		
KINS 5123	Professional Affiliation	
KINS 5903	Special Topics	
KINS 5913	Independent Study	
KINS 6573	Motor Learning and Performance	
MATH 5913	Independent Study	
Culminating Experience		3
KINS 5973	Professional Paper and Project	
Total SCHs		36

Optional Minor (6 SCH)

Students pursuing M.S. with Biomechanics and Motor Behavior emphasis typically do a minor in Math.