

KINESIOLOGY: BIOMECHANICS, MS

This is a named option in the Kinesiology, MS (<https://guide.wisc.edu/graduate/kinesiology/kinesiology-ms/>) For more information, please see our program website (<https://kinesiology.education.wisc.edu/academics/grad-program/>).

Biomechanics is the application of mechanics to biological systems. Within the broad field of biomechanics, specific areas of study at UW–Madison include: tissue mechanics, neuro-muscular control, human performance, sports performance, injury, rehabilitation, and limb dynamics. The program equips students to apply the tools of engineering analysis to biological systems from the cellular to the whole-body level with career objectives in academia, health care, and sports science. Elective coursework within the program allows students to pursue individual interests such as physiological adaptations to mechanical stimuli or computer modeling. Students generally have the opportunity to teach during their training.

The MS degree is designed to provide the necessary foundation for participation in biomechanical or injury prevention research. Coursework in biomechanics, statistics, research methods, and motor control form the basis of the formal training. Graduates of the program may pursue additional educational training and enter clinical careers, industry, or biomedical research.