



**THE OHIO STATE UNIVERSITY**  
COLLEGE OF ENGINEERING

# Advanced Topics in Biomechanics and Musculoskeletal Disorders: Contemporary Issues

## ISE 7630

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**Credit Hours:**

3.00 - 3.00

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**Course Levels:**

Graduate (5000-8000 level)

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**Course Components:**

Lecture

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**Course Description:**

Advanced seminar on contemporary topics in ergonomics; topics include, but are not limited to work-related musculoskeletal disorders, back biomechanics, upper extremity biomechanics, anthropometry, electromyography.

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**Prerequisites and Co-requisites:**

Prereq: 6660 (660), or permission of instructor.

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**Course Goals / Objectives:**

- Provide students with an opportunity to review portions of the literature concerning the upper extremity, with regards to work-related musculoskeletal disorders and biomechanics
- Develop and enhance students' abilities to critically review papers describing original research or reviews of such research
- Develop and enhance students' understanding of how to conduct high-quality research and describe that research in a paper suitable for publication in a peer-reviewed journal
- Provide students with opportunities to practice conceptualizing and developing research ideas

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**Course Topics:**

- Topics are dependent on focus of specific course offering.
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**Designation:**

Elective