Rehabilitation Engineering Applied to Mobility and Manipulation
EML 6930-901

Department: Department of Mechanical Engineering
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Semester: Summer Session C (May 16\textsuperscript{th} – July 18\textsuperscript{th})
Time: 6:00 PM - 9:00 PM, Wednesdays
Place: TBD

Text Book: "Rehabilitation Engineering Applied to Mobility and Manipulation" by Rory A Cooper, Institute of Physics Publishing, 1995

Goals: The purpose of this course is to introduce engineering principles and provide a foundation in rehabilitation engineering as applied to mobility and manipulation.

Prerequisite: Undergraduate coursework in engineering. Non-engineering majors require approval from the instructor prior to course registration.

Topics:
- Introduction
- Fundamentals of Rehabilitation Engineering Design
- Biomechanics of Mobility and Manipulation
- Universal Design and Accessibility
- Personal Transportation
- Wheelchair Safety, Standards and Testing
- Manual and Power Wheelchair Design
- Postural Support and Seating
- Prosthetics and Orthotics
- Recreational Devices and Vehicles
- Rehabilitation Robotics