Prerequisites...
At least 3 credits each in:
- Anatomy / Physiology
- Statistics
- Biomechanics / Physics

Resources

Advisory Committee...
- Professor Arun Garg (Eng), Program Director
- Professor Phyllis King (OT), Assistant Director
- Professor Barbara Hart (Human Movement Sci)
- Professor Jeanne H. Hewitt (Nursing)
- Professor Roger O. Smith (OT)
- Professor Umeth Savona (Engineering)
- Dr. Kurt T. Hegmann (University of Utah)
- Dana Root, MS, CPE (OSHA)
- Shari Violek, MS, CPE (EORM)
- Jack Dobson, CSP (Simplicity)
- Laura Hintz, MS, CPE (Blankenheim Services)
- Jodi Glanz, MS, CPE (Aon Ergonomics)
- Laura Drew, RN (Columbia St. Mary’s)
- Greg Beck (Mercy Wastage Solutions)
- Jessica Gin, MS (Harley Davidson)
- Linda Cyhana, MS (Working Therap. Solutions)
- Tina Sechotta, CSP (Chubb Insurance)
- Bruce McFarlane, CSP, EHS (Kohler)
- Cheryl Sod, OTR (Rehab. Institute of WI)
- Dave Kedel
- Mary Fitzpatrick, MS, OTR (Consultant,

Ergonomics Laboratories...
The Center for Ergonomics has three spacious, well-equipped Ergonomics Laboratories. The Occupational Ergonomics Laboratory in the College of Heath Sciences (Department of Occupational Therapy), and the Ergonomics Education and Research Laboratories in the College of Engineering. All course work in the Certificate in Ergonomics Program is supported with laboratory experience as applicable. The laboratories have a knowledgeable support staff available to answer questions, and assist with both course work and research projects.

The laboratories are equipped with EMG/Data Acquisition workstations, Lumbar Motion Monitor, Ambulatory Physiological Monitoring System, Low Back Moment Monitor, static strength measurement system, Environmental Assessment Tools, Physical Assessment instruments, Office Ergonomics demonstration equipment, Patient Transferring equipment, various dynamometers (grip, pinch, etc.) anthropometers, heart rate measurement devices, several computer workstations with job analysis software (Revised NIOSH Lifting Equation, 3D Biomechanical Model, etc..), camcorders and video editing stations, and numerous test fixtures and training materials.

Laboratories are equipped with demonstration and design spaces, and are available for student projects, and laboratory exercises.

For further information contact:
Professor Arun Garg
Director, Center for Ergonomics
University of Wisconsin - Milwaukee
PO Box 784
Milwaukee, WI 53201-0784
Tel No: 414-229-6240
Fax No: 414-229-6958
e-mail: arun@uwm.edu

http://ergonomics.uwm.edu

Certificate in Ergonomics...
A Unique Program in Ergonomics...
This innovative, interdisciplinary, Certificate in Ergonomics program was established in 1995. Today, the program is a part of the Center for Ergonomics and is designed to satisfy the demand for increased understanding of workplace safety considerations with emphasis on:
- Theoretical Concepts
- Job Analysis Techniques
- Practical Applications

Several factors have made ergonomics a rapidly growing field, e.g.,
- In 1993, the Board of Certification in Ergonomics and Human Factors began certifying the “Certified Professional Ergonomist”, or CPE.
- Workers’ compensation costs are increasing.
- Product liability cases are increasing.
- The Americans with Disabilities Act (ADA) is enforced.
- Companies have discovered that both quality and productivity are related to ergonomics.
Program Objective
The objective of the Certificate in Ergonomics Program is to provide a formal program of study, training and experience in ergonomics to those post-baccalaureate students who wish to specialize in the area of Ergonomics. The principles learned here will be applicable to a wide range of workplace settings, including: industry, hospitals, nursing homes, office work, government, and academia. The program will also be very useful in preparing for the examination for “Certified Professional Ergonomist” (CPE).

This novel, cooperative program provides an avenue for a concentration in ergonomics to non-degree graduate students, master’s and doctoral degree students in Engineering, Occupational Therapy, and Nursing as well as those enrolled in other graduate programs at the University of Wisconsin - Milwaukee. This includes students from the College of Engineering and Applied Science, College of Nursing, Department of Occupational Therapy, Department of Educational Psychology, and Human Movement Sciences. In addition, the program is open to anyone with an interest in ergonomics who satisfies the criteria for admittance as a non-degree graduate student (see Admission Requirements).

The program emphasizes theoretical principles and job analysis methods, and demonstrates various techniques and case studies for implementing ergonomic concepts in practical settings. Lectures are supplemented with laboratory experience and projects as applicable. In addition, students are exposed to state of the art research, including multi-million dollar NIOSH funded research.

The Certificate Program

Required Courses...

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th># of Credits</th>
</tr>
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<tbody>
<tr>
<td>Ergonomics of Workplace</td>
<td>490-580</td>
<td>3</td>
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<tr>
<td>Advanced Ergonomics: Low Back</td>
<td>490-780</td>
<td>3</td>
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<tr>
<td>Advanced Ergonomics: Upper Extremity</td>
<td>490-783</td>
<td>3</td>
</tr>
<tr>
<td>Applied Biostatistics in Ergonomics</td>
<td>490-786</td>
<td>3</td>
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<tr>
<td>Legal Issues &amp; Regulatory Agencies in Ergonomics</td>
<td>490-788</td>
<td>1</td>
</tr>
<tr>
<td>Design Project</td>
<td>490-790</td>
<td>2</td>
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</tbody>
</table>

Completing the Program...

More than 120 students have enrolled in the program since its inception. The vast majority of students complete the program and go on to successful careers in ergonomics.

After completing the program requirements, a Certificate in Ergonomics will be awarded by the Department of Industrial and Manufacturing Engineering within 60 days after completion of the program.

Admission Requirements

- Must be enrolled in a master’s or doctoral program in any department at the University of Wisconsin - Milwaukee (UWM).
  OR
- Must be admitted as a non-degree graduate student at UWM (see below).
- Students wishing to obtain the Certificate in Ergonomics must declare their intentions prior to completion of two of the six required courses (Contact Dr. Arun Garg for further information).

Non-Degree Graduate Students...

Those students who are not enrolled in a degree program at UWM can be admitted as non-degree graduate student, provided they meet the following requirements:

- A bachelor’s degree or higher degree with a GPA of 2.75 or higher in engineering, medicine, industrial hygiene, safety, physical therapy, occupational therapy, nursing, educational psychology or human movement sciences.
  OR
- A bachelor's degree or higher degree with a GPA of 2.75 or higher with evidence of at least one year of experience in an ergonomics and/or occupational health and safety related area.

Admission as a non-degree graduate student does not constitute admission to a master's or a doctoral degree program at UWM.