

Student Academic Qualifications Summary for UB Department of Industrial Engineering

Will have completed, when finished with Junior Year

Key Courses:

- FORTRAN or C++ programming
- Maple, Matlab
- Probability and Statistics
- Ergonomics
- Operations Research
- Production Systems
- Basic industrial engineering principles

Technical Skills:

- Probability and statistics
- Mathematical modeling and optimization
- Plant layout
 - Total plant
 - Workplace design
- Ergonomics
- Computer programming
- Computer applications in industry

Will have completed, when finished with First Semester of Senior Year

Additional Knowledge Areas:

- Quality Assurance and TQM
- Experimental Methods and design
- System simulation

Possible technical electives courses in such fields as:

- Management
- Computer graphics
- Robotics
- Computer engineering and networks