**INDUSTRIAL ENGINEERING M.S. ACCELERATED PROGRAM (1 year Program)**

**HFHSE (Human Factors & Health Systems) Program Guide** (30 credits)

NAME: ______________________________                  CAMPUS ID#: ________________

EMAIL: _____________________________

ADVISOR: _______________________            Spring – Fall       UW Course Guide

Please choose courses from drop down list or type in course. **PLEASE FILL OUT ELECTRONICALLY.**

### SPRING SEMESTER COURSE OPTIONS (12 cr):

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<tr>
<th>Dept &amp; Catalog # (example: IE 515)</th>
<th>Course Name</th>
<th># of Credits</th>
<th>IE Course Option</th>
<th>50% Grad Level Course*</th>
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### SUMMER SEMESTER COURSE OPTIONS (6 cr) or

ISyE Undergrad Coursework taken at UW (6 cr):

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### FALL SESSION COURSE OPTIONS (12 cr) or

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**TOTAL**

*Please review the Named Options M.S. Degree in ISyE policy information [here](#) for further details on the HFHSE program requirements.*

**ADVISOR:**

PRINT NAME                             SIGNATURE                             DATE

**OFFICE USE ONLY – DEGREE REQUIREMENTS CONFIRMED**

ISyE Graduate Chair                   Date                               GSC Review

**Please review additional information on the following page.**
*50% Graduate School Policy*: Graduate school requires 50% (15 credit) of courses be of graduate level. Upon completion of program requirements, please review your program guide with advisor for signature and bring this form to the COE Graduate Center in 3182 Mechanical Engineering to request final warrant from the Graduate School. Please note if you earn a grade of C or below in a course you CANNOT count that course towards the 30-credit requirement.

**Note:** At least 18 credits of ISyE Course Credits taken during the graduate program are required. Prior ISyE undergraduate coursework does NOT count toward meeting this requirement.

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**FINAL SEMESTER REQUIREMENTS**

- At the beginning of the final semester, students please complete the form, have it signed and approved by faculty advisor to then upload to ISyE BOX folder system for processing. Once saved to your Box file, please send confirmation email to Pam Peterson/ISyE Graduate Coordinator at prpeters@engr.wisc.edu that your approved form has been saved to your Box file to request your final warrant. An email notification will then be sent to you once your warrant has been processed and can be picked up from the Graduate Student Service office in ME 3182.
  - Apply online for graduation through MyUW student center.
    - Please see instructions here.

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**EXIT REQUIREMENTS**

*In order to be eligible for graduation, a Master's student must:*

- Have a GPA of 3.0 or higher
- Meet all MS degree requirements for their focus area
- Have all grades entered, except for the current semester. No Incomplete (I's) or No Report (NRs) grades can show on the student’s transcript.
- Be enrolled in at least 2 credits the semester in which they graduate.
- Have their MS degree warrant signed and dated by the degree deadline.
- Please note if you earn a grade of C or below in a course you CANNOT count that course toward the 30-credit requirement.
- Review Graduate School Policy on finishing up your master's degree.

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**JOB PLACEMENT**

Engineering Career Services Office  
1150 Engineering Hall  
1415 Engineering Drive  
Madison, WI 53706  
Tel: (608) 262-3471  
Email: ecs@engr.wisc.edu  
[https://www.engr.wisc.edu/academics/student-services/career-services/](https://www.engr.wisc.edu/academics/student-services/career-services/)

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**FURTHER INFORMATION**

University of Wisconsin-Madison  
Industrial Engineering Department  
1513 University Avenue, Room 3270  
Madison, WI 53706-1572  
Tel: (608) 262-2686  
Email: iegradadmission@engr.wisc.edu  
[https://www.engr.wisc.edu/department/industrial-systems-engineering/](https://www.engr.wisc.edu/department/industrial-systems-engineering/)
IE HFHSE Program Course Offerings

Below is a typical curriculum for those pursuing a MSIE-Course Only option in Human Factors and Health Systems Engineering. These are suggested courses and are not guaranteed to be offered at the time of enrollment.

**Note:** At least 18 credits of ISyE Course Credits taken during the graduate program are required. Prior ISyE undergraduate coursework does NOT count toward meeting this requirement.

**FALL POTENTIAL COURSE OPTIONS:**

- ISyE 313 – Engineering Economic Analysis
- ISyE 349: Introduction to Human Factors
- ISyE 417: Health Systems Engineering
- ISyE 601: 002 – IE Special Topics: Human Computer Interaction
- ISyE 653: Organization and Job Design
- EMA 601: Special Topics in Engineering Mechanics
- Pop Health 797: Introduction to Epidemiology
- OTM 451: Service Operations Management
- OTM 770: Sustainable Approaches to System Improvement

**SPRING POTENTIAL COURSE OPTIONS:** (potential – course guide will be published mid-October)

- ISyE 313: Engineering Economic Analysis
- ISyE 349: Introduction to Human Factors
- ISyE 417: Health Systems Engineering
- ISyE 555: Human Performance and Accident Causation
- ISyE 559: Patient Safety and Error Reduction in Healthcare
- ISyE 564: Occupational Ergonomics and Biomechanics
- ISyE 575: Introduction to Quality Engineering
- ISyE 601: Special topics TBD (if offered and advisor approval needed)
- ISyE 608: Safety and Quality in the Medication Use System
- MHR 412: Management Consulting
- OTM 753: Healthcare Operations Management
- Pop Health 785: Health Systems, Management, and Policy

**SUMMER POTENTIAL COURSE OPTIONS:** (potential – course guide will be published mid-January)

- ISyE 313: Engineering Economic Analysis
- ISyE 349: Introduction to Human Factors
- ISyE 516: Introduction to Decision Analysis
- ISyE 575: Introduction to Quality Engineering
- ISyE 601: Special topics TBD (if offered and advisor approval needed)

**Other Department Course Suggestions:**

- BMI 576: Introduction to Bioinformatics – Fall
- BMI 773: Clinical Research Informatics – Spring
- BMI 776: Advanced Bioinformatics – Spring
- Nurs 761: Health Program Planning, Evaluation & Quality Improvement – Spring
- Pop Health 875: Assessment of Medical Technologies – Spring
- Pop Health 876: Measuring Health Outcomes – Spring
IE Course Options listed but not currently planned to be offered 2017 – 2018:

- ISyE 552: Human Factors Engineering Design and Evaluation
- ISyE 556: Occupational Safety and Health Engineering
- ISyE 565: Ergonomics in Service
- ISyE 601: Special topics TBD
- ISyE 610: Design of Program Evaluation Systems
- ISyE 617: Health Information Systems
- ISyE 652: Sociotechnical Systems
- ISyE 662: Design for Human Disability and Aging
- ISyE 703: Quality of Health Care: Evaluation and Assurance
- ISyE 764: Occupational Biomechanics