Admission Requirements

- ABET-accredited bachelor of science degree in engineering.
- 2. A minimum undergraduate GPA of 3.0.
- 3. GRE minimums of 400 on Verbal, 500 on Quantitative and 1,000 overall.
- 4. GRE minimum Analytical Writing score of 4.0.
- Undergraduate Engineering Statistics and Engineering Economy courses.

Notes:

The systems engineering and engineering management programs require 2 years of relevant work experience before students will be considered for full-time study.

Applicants who have successfully completed the Fundamentals of Engineering examination may use this in place of the GRE.

The GRE may be waived for applicants who have met all other requirements and who have a minimum of 5 years of relevant professional experience.

Outstanding graduates (minimum GPA of 3.5) from other technical fields may be considered for unconditional admission to the programs after they have completed the undergraduate prerequisite courses.

Exceptional students who do not meet GPA and course prerequisites may be granted a conditional admission to the program.

Industrial and Systems Engineering and Engineering Management Department N143 Technology Hall Huntsville, AL 35899



Master of Science in Engineering

Systems Engineering Concentration

Industrial and Systems Engineering and Engineering Management Department N143 Technology Hall Huntsville, AL 35899

256.824.6256 www.iseem.uah.edu



Our Mission

To provide integrated, applications-oriented education and research programs in the areas of industrial engineering, systems engineering, and engineering management

Industrial Engineering:

The industrial engineering concentration meets the needs of new and practicing engineers who desire to broaden their analytical skills to expand the technical opportunities in their careers. A focus in operations research is also available

Systems Engineering:

The systems engineering concentration focuses on practicing engineers who are developing and fielding large-scale complex systems and are seeking to enhance their analytical and managerial skills.

Engineering Management:

The engineering management concentration has been developed to meet the needs of practicing engineers who are performing management or project management without the benefit of a formal education in these areas.

Program Delivery Options

Graduate students may elect to take classes through either a traditional classroom setting or by distance learning.

Both delivery approaches are supported by class web support sites and electronic smartboard capture.

Website: www.engdl.uah.edu **Phone:** 256-824-6976

Sample Program of Study for the Systems Engineering Concentration

Major Courses (12 credit hours):

ISE 627 Engineering Systems
ISE 723 Engineering Economic Analysis
ISE 734 Decision Analysis
ISE 670 Integrated Product and Process Design

1st Minor (6 credit hours):

ISE 690 Statistical Methods for Engineers ISE 526 Design and Analysis of Experiments

2nd Minor (6 credit hours):

Course sequences are available in engineering management, industrial engineering, operations research, quality engineering, and reliability. Students may also select courses outside the department.

Options for Electives (6 to 12 credit hours):

Plan I – Thesis Option (6 to 9 thesis credit hours). This supports students who enjoy planning and executing independent research work. Students who are working in research and development, or are planning to continue on to the doctoral program are encouraged to consider the thesis option.

Plan II – Non-Thesis Capstone Option (9 credit hours of elective courses and a 3 credit hour research paper). This supports part-time students who wish to broaden their education and still learn the fundamentals of research.

Plan IIB – Non-Thesis Capstone Option (12 credit hours of elective courses). This option supports the part-time student who is limited in research options due to travel or organizational issues.

Degree Requirements:

Courses are selected by the student and their academic advisor, and approved by the Graduate School. Additional courses may be required to address deficiencies and for students who have English as a second language. A minimum GPA of 3.0 and a minimum of a "B" on all 500 level courses on the program of study is required.

Faculty and Areas of Specialization

Dr. Phillip A. Farrington, Dean and Professor

256.824.6474

paf@eng.uah.edu

Industrial Engineering: Product development, design and analysis of experiments

Dr. Sampson E. Gholston, Associate Professor 256.824.7310

gholston@ise.uah.edu

Industrial Engineering: Statistics, lean, six-sigma

Dr. Sherri L. Messimer, Associate Professor

256.824.6211

messimer@ise.uah.edu

Industrial Engineering: Manufacturing, operations research

Dr. Gillian M. Nicholls, Assistant Professor

256.824.6637

Gillian.Nicholls@uah.edu

Industrial Engineering: Operations Research, multi-criteria decision analysis

Dr. James J. Swain, Chair and Professor

256.824.6749

iswain@ise.uah.edu

Industrial Engineering: Statistics, simulation, operations research

Dr. Dawn R. Utley, Associate Professor

256.824.6075

utley@ise.uah.edu

Engineering Management: Organizational culture, team operations