



Graduate Programs in Industrial Engineering

Acquire advanced knowledge and skills to improve and optimize operations with applications in industry, government, and education.

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PARTIAL AND FULL SCHOLARSHIPS AVAILABLE!

MSIE

Full-time or part-time
Online (8-week terms) • On-Campus
30 credit hr
Course • project • thesis

MEng - Eng Management

Full-time or part-time
Online-only (8-week terms)
30 credit hr, Course option
Six Sigma Black Belt Option

PhD

Academic or industry position
Interdisciplinary research
Teaching opportunity
Attend international conferences

WHAT WOULD YOU LEARN?

Industrial Engineering

- Engineering Management

- Operations Research

- Logistics/Supply Chain

- Six Sigma and Lean

- Data Analytics/Machine Learning

- Human Factors/User Experience

- Advanced Manufacturing

WHAT RESEARCH COULD YOU DO?

Operations Research and Data Analytics

METHODOLOGIES

Data analytics, statistical modeling, optimization, algorithms, simulation, quality and reliability, machine learning

APPLICATIONS

Supply chain/logistics, healthcare, retailing, entertainment, defense, energy

Human Factors and Ergonomics

METHODOLOGIES

Experimental design with human subjects, human-centered design, engineering anthropometry, safety and hazard control

APPLICATIONS

Healthcare, aviation, industrial workspace design, defense, entertainment, technology, automotive

Advanced Manufacturing

METHODOLOGIES

Design of experiments, statistical modeling, materials/manufacturing science, mechanics, thermo/fluid dynamics, automation

APPLICATIONS

Aerospace, biomedicine, energy, automotive, pharmaceutical manufacturing, robotics

OUR GRADUATES ARE HIRED BY



TESLA



Michael Spegele, MEngEM 2021

One of the main reasons I enrolled in UofL's Master of Engineering in Engineering Management program was to boost my growth potential in the biopharmaceutical industry. The curriculum and professors have done exactly that by **sharpening my knowledge base from a management standpoint**, as well as developing key skills which have been applicable to my current and previous jobs. I have found myself frequently using these skills at work, which has kept me ahead of the curve. The program also led to a few attractive employment opportunities, one of which I recently accepted and couldn't be happier with. Reflecting over the last two years, I can say with conviction that this program has **led to a greater sense of career fulfillment**.



Rae Mills, MEngEM (expected 2021)

The Engineering Management program has **taught me many valuable skills in applying technical knowledge** to real life problems. I have also had the opportunity to learn about topics that I wouldn't have previously had access to such as **management law and finance management**. I can't speak highly enough about the professors and my fellow classmates that I have had the pleasure of collaborating with. The EM program is great for anyone who is transitioning into a work environment and wants to enhance their skills applying the technical knowledge learned in undergraduate studies.



Prayag Vatsraj, MSIE 2018

The instructors are friendly and are always willing to help. They are well connected in the industry, which makes the courses really engaging. There is a practical problem we get to solve as part of the projects. Employers prefer real-life experiences and **these projects became instrumental for me in securing my first job**. For international students UofL's international office staff, simply put, are just amazing. Lastly **Louisville is just the right size** as far as city is concerned: all the fun with almost no traffic jams!



Jodie Ritter, MSIE (expected 2022)

I was impressed with the diversity within the IE department at the University, including the **number of female professors**. As a woman in the engineering profession, it has always been a challenge to find female role models within the profession. I was clearly nervous, **restarting my education after a long break in my career** and having no prior work experience in industrial engineering. New to the program and the school, professors were happy to make introductions to other students to partner with for team projects and homework. The faculty is very supportive and interested in ways they can help me to be successful and gain research experience in my areas of interest. Overall, the experience has been challenging and rewarding at the same time.



Mina Shekari, PhD 2020

Being a Research Assistant at Logistics and Distribution Institute at the speed school of engineering brought me a significant opportunity to truly learn and practice science, in the field of logistics and material handling, in addition to very **essential soft skills such as leadership and teamwork**. Moreover, working with a group of graduate students from all around the globe, was tremendous to **evolve my understanding of different cultures**, in addition to making the daily work fun. The support I received from my advisers throughout my Ph.D. adventure was crucial to my great achievements, testified by the Women in Operations Research-Bayer scholarship and Doctoral Colloquium Student Sponsorship Award at INFORMS.



Jacob Read, PhD (expected 2021)

Going through Speed School **really made me grow as a person**. I had never been challenged so much intellectually, to the point of wondering whether or not I was capable of finishing the program. Now, having obtained both my BSIE and MEngIE from UofL and while currently pursuing my PhD in IE from UofL, I can more confidently say I can tackle any challenges that are placed in front of me. I would like to give credit to one professor in particular, for not only working with me through my Master's degree, but also encouraging me to publish my work in professional journals and to pursue my PhD. **One lesson I will take with me throughout my career, and my life**, is to never stop asking questions and to never stop learning.

