

Master of Engineering: Engineering Data Analytics

BEST
ONLINE PROGRAMS

U.S. News
& WORLD REPORT

GRAD ENGINEERING
2021

Become the engineer who confidently leads the transformation of big data into informed, high-impact actions.

What You Learn

- Understand and apply appropriate data analysis tools and methods to drive improvements to products and processes, research, design, testing, and operations.
- Apply best methods and practices for the capture, storage, cleaning, querying, analysis, and visualization of data
- Evaluate and implement the most effective computing technology, modeling techniques, and analysis methods for your engineering projects
- Sharpen your ability to effectively lead change efforts by improving your skills in project management, team leadership, and professional communications.

Where and How You Learn

Where Online; you may start in the fall or spring semester of any year

How Complete 15-credit core curriculum in data analytics and 15 elective credits that span either additional data science courses or other online engineering and professional development courses.

Classes meet online once a week; each class is recorded, so you can participate regardless of your travel schedule or location.

Apply Now!

Visit go.wisc.edu/MEDA

At a Glance

Delivery: Online

Credits: 30 graduate credits

Time Frame: 2 to 3 years

Tuition: Resident and non-resident:
\$1,300 per credit

Typical Curriculum

- Industrial Data Analytics
- Machine Learning
- Database Design and Management
- Design Optimization
- Data Visualization
- Applied Temporal Data Analytics
- Technical Project Management
- Engineering courses in Leadership, Manufacturing, Polymer Engineering, and Sustainable Systems

Questions?

For more information on admission requirements, how to apply, tuition and financial aid or other questions, contact:

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I selected the MEDA program as a way to supplement my engineering background in a world inundated with data. The program has delivered by providing new skills, directly improving the value of my work.

*John Kroening,
Oshkosh Corp.*



**Interdisciplinary
Professional Programs**
COLLEGE OF ENGINEERING
UNIVERSITY OF WISCONSIN-MADISON

Sample Plan of Study

| | Class Number | Class Name | Cr |
|--------------------------|--------------|--|----|
| 1st FA | ECE 532 | Matrix Methods in Machine Learning | 3 |
| | LIS 751 | Database Design for Information Professionals | 3 |
| 1st SP | ISyE 612 | Applied Temporal Data Analytics for Engineers | 3 |
| | ME 548 | Introduction to Design Optimization | 3 |
| 1st SU | ISyE 512 | Inspection, Quality Control, and Reliability | 3 |
| 2nd FA | ME 459 | Computing Concepts for Applications in Engineering | 3 |
| | ISyE 602 | Interactive Data Visualization | 3 |
| 2nd SP | ME 759 | High-Performance Computing for Applications in Engineering | 3 |
| | ISyE 620 | Simulation Modeling and Analysis | 3 |
| 3rd FA | | Choose an elective | 3 |

Listed courses and schedule are subject to change

Choose from a Broad Selection of Elective Courses in Four Concentrations

Add electives from one or more concentrations to reach degree requirements of 30 credits. You develop your custom plan of study in consultation with the program director

Leadership

Engineering Economics and Management..... 3 cr.
 Technical Project Management..... 3 cr.
 Fostering and Leading Innovation3 cr.

Manufacturing

Fundamentals of Industrial Data Analytics..... 3 cr.
 Quality Engineering and Quality Management 3 cr.
 Design and Analysis of Manufacturing Systems..... 3 cr.

Sustainable Systems

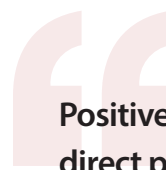
Core Competencies of Sustainability..... 3 cr.
 Special Topics: Distributed Renewable Systems Design..... 3 cr.
 Sustainable Approaches to System Improvement.....4 cr.

Polymers

Engineering Design with Polymers..... 3 cr.
 Polymer Characterization3 cr.
 Polymer Coatings3 cr.
 Plastics Recycling and Sustainability3 cr.

Professional Development Electives

Connected Learning Essentials..... 1 cr.
 Presentations for Professionals..... 1 cr.
 Writing for Professionals..... 1 cr.
 Marketing for Non-Marketing Professionals..... 1 cr.
 Organizational Communication and Problem Solving..... 1 cr.
 Change Management 1 cr.
 Leading Teams..... 1 cr.
 Creating Breakthrough Innovations 1 cr.
 Ethics for Professionals..... 1 cr.
 Effective Negotiation Strategies..... 1 cr.



Positively challenging. Advanced topics with direct professional applications.

*Omar Saleh,
WEC Energy Group*

College of Engineering • Interdisciplinary Professional Programs

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