WRIGHT STATE UNIVERSITY

Department of Biomedical, Industrial & Human Factors Engineering

Master of Engineering Innovation & Entrepreneurship

The Department of Biomedical, Industrial and Human Factors Engineering, Wright State University's College of Engineering and Computer Science and the Raj Soin College of Business offer the Master of Engineering Innovation and Entrepreneurship (MEIE) program. The MEIE program prepares students for innovation and entrepreneurship through **seven key goals**:

1. To expose students to the concepts of entrepreneurship from both a business and engineering perspective
2. To emphasize problem solving and creative thinking
3. To provide first-hand experience in generating a business plan
4. To provide students with practical industry experience from concept development in preparation for market introduction
5. To expose students to multiple engineering and business disciplines, and to work in diverse, multi-cultural teams
6. To provide students the opportunity to interact with, and learn from Dayton area high tech entrepreneurs
7. To produce graduates who have the technical expertise and the keen understanding of the business environment needed to succeed in entrepreneurial activities

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Who Should Apply

The MEIE program seeks individuals with a solid undergraduate record who have a strong desire to pursue success in entrepreneurial endeavors. Applicants from any undergraduate major will be considered, though students with a background in engineering, business, or science are likely to be better prepared for the program. Graduates will have a distinct advantage, having acquired both technical expertise and business acumen through the program's unique combined perspective. Applicants with one or more years of experience in engineering or business are encouraged to apply.

Requirements for regular admission

- A completed bachelor's degree with a minimum 2.7 GPA
- Competent GRE scores for applicants whose undergraduate degree is not from an ABET-accredited engineering program (GMAT scores will be considered for applicants whose undergraduate degree is not in engineering).
- Additional prerequisite coursework may be required for students whose undergraduate degree is not in engineering.

Coursework (Complete program guide on reverse)

Foundation Accounting Course	3 credits*	(*if no previous accounting coursework)
Core Courses	17 credits	
Technical Track	9 credits	(choose from several technical engineering tracks)
Team Project	6 credits	(taken over two semesters during the final program year)
Total	**32-35 credits**	

Department of Biomedical, Industrial & Human Factors Engineering
207 Russ Engineering Center ● Dayton, Ohio 45435
937-775-5044
http://cecs.wright.edu/bie/

MEIE Master Planning Schedule

DEPARTMENT		Cr	FALL	SPRING	SUMMER	Prerequisites
Foundation Course						
MBA 5100*	Survey of Financial Accounting*	3	☑	☑	☑	None; *requirement waived with prev acctg
Core Courses (17 credit hours)						
EC 7280	Economics of Innovation**	3			☑	Micro/macroeconomics
IHE 6010	Ethics in Engineering Research & Practice (d)	1	☑	☑		None
IHE 6400	Engineering Economy (d)	3	☑			EGR 1010 or MTH 2300
IHE 6410	Technology-Based Ventures (d)	3		☑		None
IHE 6420	Innovation & Entrepreneurship Seminar Series (d)	1		☑		None
MBA 7600	Marketing Strategy**	3	☑	☑	☑	None
MKT 7300	Entrepreneurship**	3	☑		☑	MBA 7600
Track Options (Select 9 credit hours from one track)						
Biomedical Imaging Track						
BME 7110	Biomedical Signals	3	☑			None; assumes undergrad egr coursework
BME 7112	Processing of Medical Images	3		☑		BME 7110
BME 7131	Medical Ultrasonics (e)	3		☑		BME 4703/6703
BME 7132	Computed Tomography (o)	3		☑		BME 4703/6703
BME 7133	Nuclear Magnetic Resonance in Medicine	3	☑			BME 4703/6703
Data Management & Analysis Track						
CS 6700	Introduction to Database Management Systems	3	☑	☑		CS 3100/5100
CS 7700	Advanced Database Systems	3	☑	☑		CS 4700/6700
CS 7720	Data Mining	3	☑			CS 4700/6700 or CS 4850/6850
CS 7800	Information Retrieval	3		☑		CS 3100/5100
CS 7810	Knowledge Representation and Reasoning (e)	3		☑		None; assumes undergrad CS coursework
CS 7820	Advanced Topics in Semantic Web (o)	3		☑		CS 7800 or CS 7810
Industrial and Systems Engineering Track						
EGR 7020	Systems Engineering & Analysis (d)	3	☑	☑		(STT 3630 or IHE 6120) and MTH 2310
EGR 7050	Design & Analysis of Engineering Experiments (d)	3	☑			(STT 3630 or IHE 6120) and MTH 2350
IHE 6711	Optimization Methods (d)	4	☑			MTH 2350
IHE 7010	Understanding and Aiding Human Decision Making (d)	3	☑			IHE 6120 or ISE 2211
IHE 7370	Medical Devices	3	☑			IHE 6300
IHE 7712	Discrete Event Modeling and Analysis (d)	3		☑		IHE 6120
Sensors Track						
EE 6360	Digital Signal Processing	3	☑			None; assumes undergrad EE coursework
EE 7010	Applied Linear Techniques	3	☑	☑		None; assumes undergrad EE coursework
EE 7150	Digital Image Processing	3	☑			None; assumes undergrad EE coursework
EE 7160	Multisensor and Information Fusion (as needed)	3				EE 7610
EE 7170	Target Tracking and Data Association (as needed)	3	☑			EE 7610
EGR 7020	Systems Engineering & Analysis (d)	3	☑	☑		(STT 3630 or IHE 6120) and MTH 2310
Capstone Project (6 credit hours)						
EGR 7910	MEIE Team Project I	3	☑			Instructor/Department permission; must be in final full year of program
EGR 7920	MEIE Team Project II	3		☑		
Total Credits – 32 - 35						

(d) = also offered via distance education; (e) = offered even years; (o) = offered odd years;
**Permission required from RSCOB to enroll in graduate level business courses.

Note: Class schedules may change, please confirm class offerings with departments

rev. 7/17