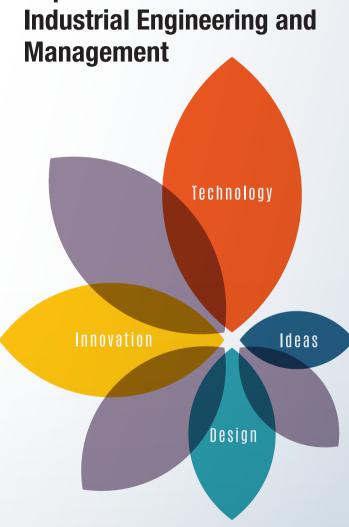
# Yuan Ze University 元智大學

**Department of** 









#### Introduction

Management guru Peter Drucker once said the greatest contribution to industrial development in the 20th century came from the application of management techniques to industrial engineering. Foxconn Technology Group (Hon Hai Precision Industry Co., Ltd.) Chairman Terry Kuo also stated that industrial die casting is the mother of industry, while its father is industrial engineering. Founded in 1989, Yuan Ze University Department of Industrial Engineering began offering post-graduate degree programs in 1990, with PhD being offered in 1992, making it the first private university in Taiwan to offer such a program. In 2000, the department was renamed the Department of Industrial Engineering and Management. Thus, over the course of three years, the department established a complete academic ecosystem, giving industrial engineering management an appropriate academic emphasis.

The department currently has 21 full-time faculty members, all with PhDs from well-known international institutions. In May, 2008, the department received international validation through certification

by the Institute of Engineering Education (IEET). In 2014 & 2017, the department passed the IEET Phase II certification, ensuring the department's continued excellence.

#### **Education Goal**

To meet the global and individual customized local needs, the Industrial Engineering & Management of Yuan Ze University emphasizes fostering talents with integration of engineering

technology and management science centered on Smart Production which integrating four key areas:

Mobile Technology and Cloud Computing, Human Factor Engineering and Design, Global Logistics Management, and Big Data Analytics.



#### **Admission & Scholarship Application Information**

#### **Graduate Programs:**

Both Master & PhD programs require online application

- Fill up required related information online
- · Upload required validated documents online

#### **Scholarships:**

- Master: TaiwanICDF, YZU, MOFA, MOE, etc.
- PhD: YZU, MOFA, MOE, etc.

#### Laboratory

- 3D Interactive Digital Content/VR Lab
- Business Excellence & Service Management Lab
- Computer-Integrated Manufacturing System Lab
- Computerized Facility Planning and Simulation Lab
- Decision Analysis Lab
- E-enterprise and Production Management Lab
- ERP/Mobile Commerce Lab
- Global Logistics and Innovative Optimization Lab
- Human Factors & Design Lab
- Machine Vision Lab
- Quality Control & Precision Measurement Lab
- Statistical Data Analysis & Quality Design Lab
- Supply Chain Management & Scheduling Optimization Lab
- WWW/AI/OR Lab

#### **Life Sharing & Activities**



#### Taiwan ICDF



YZU

IEM. YZU





Global Affairs Office

















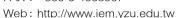


## Yuan Ze University 元智大學

**Department of Industrial Engineering and Management** 

135 Yuan-Tung Rd., Chung-Li, Taoyuan, Taiwan 320 R.O.C.

TEL: +886-3-4638800 Ext. 2501





The program offers higher level of scientific management applications/ techniques (ex. big data, IoT, etc.) applicable to multiple levels & cross industries (ex. business, service, manufacture, medicine, finance, education, etc.) w/ courses available but not limited to: Data Mining, Statistical Quality Control, Business Excellence, Big Data, Internet of Things (IoT), Applied Statistics, e-Commerce, Mobile Commerce, Service System Design, Enterprise Resource Planning (ERP), Supply Chain & Logistic Management, Stochastic Models, Automatic Manufacturing & Production Management, 3D Visual Simulation & VR, Usability Engineering (Human Factors), Computer-Aided Design & Manufacturing (CAD/CAM), Mathematical Programming, etc.

**Master:** Minimum graduate credit will be 30 credits including 6 credits for thesis; refer to more detail on IEM website.

**PhD:** Minimum graduate credit will be 33 credits including 6 credits for thesis; refer to more detail on IEM website.

Courses available as the following, but not limited to:

Course			
Code	Courses Taught in English		
IE503	Simulation		
IE505	Stochastic Processes (I)		
IE507	Mathematical Programming (I)		
IE517	Inventory Systems and Control		
IE533	Probabilistic Analysis		
IE538	Experimental Design and Applications		
IE555	Group Decision Making		
IE561	Statistical Methods and Data Analysis		
IE562	3D Visual Simulation and Virtual Reality		
IE576	Global Logistics Management		
IE579	Transportation Management		
IE581	Service System Design		
IE590	Machine Vision		
IE599	Data Mining		
IE602	The Operational Models of E-Enterprise		
IE604	Enterprise Resources Planning		
IE607	Heuristic Optimization		
IE609	The Management of Enterprise Digitization		
IE610	Mobile Commerce		
IE614	Data Pattern Recognition and Classification		
IE619	Design and Construction of Virtual Reality Systems		
IE622	Managing for Business Excellence		
IE624	Usability Engineering		
IE625	Big Data Analytics		

**Faculty** IEM has 21 full time faculties who all graduated from the world well known institutions to educate and prepare our students in accomplishing their personal goals as well as providing the ever changing global industry with highly adaptable, solution oriented and proactive technological and managerial professionals.

Name & Title	Education	Research Interests
Liang, Yun-Chia Professor and Chair	Ph.D. in Industrial & Systems Engineering, Auburn University, USA	Meta-Heuristics, Intelligent Computing, Production Scheduling, Logistics Management, Artificial Neural Network Applications
Tsai, Du-Ming Chair Professor	Ph.D. in Industrial Engineering, Iowa State University, USA	Machine Vision & Automated Visual Inspection, Manufacturing Automation
Chen, Yun-Shiow Professor	Ph.D. in Statistics, Ohio State University, USA	Reliability Statistical Analysis, Statistical Quality Control Design, Statistical Analysis in Data Mining, Economic Control Chart Design, Demand Forecasting Analysis
Cheng, Chuen-Sheng Professor	Ph.D. in Industrial Engineering, Arizona State University, USA	Quality Control, Six Sigma, Total Quality Management, Quality Engineering, Applications of Artificial Intelligence, Applications of Artificial Neural Networks
Tseng, Yuan-Jye Professor	Ph.D. in Industrial Engineering, Pennsylvania State University, USA	Computer-Aided Design, Computer Aided Manufacturing, Industrial Automation, Computer Graphics, Supply Chain Management
Chen, Chi-Kuang Professor	Ph.D. in Industrial Engineering, University of Wisconsin at Madison, USA	Business Excellence Management, Total Quality Management, Service System Management, Business Process Reengineering, Behavioral Decision Analysis, Group Decision Analysis
Chen, Yee-Ming Professor	Ph.D. in School of Engineering, University of Leeds, UK	System Fault Detection and Diagnosis, Data Fusion and Mining, Software Multi-Agent, Expert System
Tsai, Chieh-Yuan Professor	Ph.D. in Industrial & Manufacturing Systems Engineering, University of Missouri-Columbia, USA	Product Data Management, Data Mining, E-Commerce, RFID Technology and Applications
Ting, Ching-Jung Professor	Ph.D. in Civil Engineering, University of Maryland, USA	Supply Chain Management, Transportation System Analysis, Logistics Management, System Simulation Analysis
Su, Chuan-Jun Professor	Ph.D. in Industrial Engineering, Texas A&M University, USA	Electronic Commerce, Business Process Re-engineering, Enterpris e Resource Planning, Virtual Reality
Hu, Michael Huang-Der Associate Professor	Ph.D. in Industrial Engineering, The University of , Iowa, USA	Computerized Facility Planning, Engineering Economic Analysis, Engineering Ethics, Logistics
Chung, Yun-Kung Associate Professor	Ph.D. in Industrial and Management Engineering, The University of Iowa, USA	Bio-Computing, Object-Oriented Web-Based Applications Design, Intelligent Systems Design, MRP/JIT Production Systems
Sun, Tien-Lung Associate Professor	Ph.D. in Industrial Engineering, Texas A&M University, USA	3D Serious Game, 3D interactive digital content, Virtual Reality
Lin, Chen-Ju Associate Professor	Ph.D. in Industrial & Systems Engineering, Georgia Institute of Technology, USA	Quality Engineering and Management, Spatiotemporal Statistical Analysis, Process Capability Analysis, Applied Probability and Statistics
Lin, Ray F. Associate Professor	Ph.D. in Industrial & Systems Engineering, University at Buffalo, SUNY, USA	Human Factors in Product Designs, Human-Control Movements, Human Factors in Healthcare & Patient Safety, User-Centered Design
Chou, Chin-Mei Associate Professor	Ph.D. in Department of Environmental Ergonomics, Graduate School of Design, Kyushu University, Japan	Environment Ergonomics Design, Applied Ergonomics Design, Ergonomics Applied in Protective Clothing Design, Kansei Engineering and Physiological Anthropology, Universal Design
Tsai, Chi-Yang Assistant Professor	Ph.D. in Industrial & Operations Engineering, University of Michigan, USA	Supply Chain and Inventory Management, Production and Operations Management, Production Scheduling
Jen, Hen-Yi Assistant Professor	Ph.D. in Construction Engineering & Management, Purdue University, USA	Project Management, Process Analysis & Simulation, Lean Production & Services, Service Engineering
Lee, Chieh Assistant Professor	Ph.D. in Operations Management, Washington State University, USA	Global Supply Chain Risk Management, Operations Research, Logistics Risk Management, Operations Management in e-commerce
Wu, Gen-Han Assistant Professor	Ph.D. in Industrial Engineering & Operations Research, Pennsylvania State University, USA	Production and Operations Management, Logistics and Supply Chain Management, Applied Operations Research, Decision Analysis, Algorithm
Huang, Hao Assistant Professor	Ph.D. in Industrial & Systems Engineering, University of Washington, USA	Simulation Optimization, Simulation, Operations Research, Healthcare Management Decision Analysis
Wang, Kuo-Ming Emeritus Chair Professor	Ph.D. in Industrial Engineering, Kansas State University, USA	Technology Management, Productivity Management, Service Management, Engineering Economy, Higher Education Management, Gerontechnology Research
Chang, Hou-Tai Lecturer (Joint Appointment)	M.S. in Graduate Institute of Health Care Organization Administration, National Taiwan University	Pulmonary Medicine, Critical Care Medicine, Internal Medicine, Medical Quality Management

### **A Global Learning Environment**

Varieties of cultural and international activities are provided by the university, international student clubs, as well as the IEM department, in addition to English taught classes. Founded by the Far Eastern Group, we have established close relationships with all of its subsidiaries to form an industrial and academia alliance. With students coming from different corners of the world under the same roof, you will enjoy your studying time with IEM at YZU.





#### **Future Path & Career**

Many foreign master students after graduation choose to come back or stay on for our PhD program. Our alumni also acquire jobs in or outside of Taiwan or back in their homelands soon after their graduations. Such phenomenon is the best evidence of the success of our program.

#### **Contact Information**

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