

Industrial Engineering (PhD)

Degree Requirements

Code	Title	Hours
Required Course		1
ISE 801	Seminar	
Core Courses		18
Select Core courses from the list below. Core Courses should include a minimum of two 700-level ISE courses approved in conjunction with the academic committee		
Elective / Research Courses		54
"Elective / Research Courses" are approved in conjunction with the academic committee		
Total Hours		73

Core Courses

Code	Title	Hours
Select a minimum of one course from each category:		
Human Factors and Ergonomics		
ISE 540	Human Factors In Systems Design	
ISE 541	Occupational Safety Engineering	
ISE 544	Occupational Biomechanics	
ISE 741	Systems Safety Engineering	
ISE 744	Human Information Processing	
ISE 745	Human Performance Modeling	
ISE 794	Advanced Problems in Ergonomics	
Manufacturing Systems		
ISE 515	Manufacturing Process Engineering	
ISE 517	Fundamentals of Additive Manufacturing	
ISE 554	Introduction to Product Development	
ISE 716	Automated Systems Engineering	
ISE 718	Micro/Nano-Scale Fabrication and Manufacturing	
Supply Chain and Logistics		
ISE 552	Design and Control of Production and Service Systems	
ISE 553	Modeling and Analysis of Supply Chains	
ISE 723	Production Planning, Scheduling and Inventory Control	
ISE 726	Theory of Activity Networks	
ISE 748	Quality Engineering	
ISE 754	Logistics Engineering	
ISE 861	The Design of Production Systems	
Systems Analytics and Optimization		
ISE 501	Introduction to Operations Research	
ISE 505	Linear Programming	
ISE 537	Statistical Models for Systems Analytics in Industrial Engineering	
ISE 560	Stochastic Models in Industrial Engineering	
ISE 562	Simulation Modeling	
ISE 709	Dynamic Programming	

ISE 760	Applied Stochastic Models in Industrial Engineering
ISE 761	Queues and Stochastic Service Systems
ISE 762	Stochastic Simulation
ISE 766	Network Flows
ISE 772	Simulation Optimization

Faculty

Full Professors

Jingyan Dong

Shu-Cherng Fang

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Julie Simmons Ivy

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Yuan-Shin Lee

Maria Esther Mayorga

Chan S. Nam

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Reha Uzsoy

Associate Professors

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Assistant Professors

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Practice/Research/Teaching Professors

Semra Sebnem Ahiska King

Fred Livingston

Brandon Mark McConnell

Nur Ozaltin

Kanton Tyrone Reynolds

Christopher Rock

Michael Spano

Harvey A. West II

Adjunct Professor

Amy Diane Wilson

Adjunct Associate Professor

Yunan Liu

Emeritus Faculty

Mahmoud A. Ayoub

Richard Harold Bernhard

Paul Cohen

Charles Thomas Culbreth Jr.

Thom Joel Hodgson

Henry Nuttle

Richard G. Pearson

Stephen Dean Roberts

Ezat Sanli

Clarence Smith Jr.

James Reed Wilson

Richard Wysk

Robert E. Young