

Operations Research (MR)

Degree Requirements

Code	Title	Hours
Required Operations Research Seminar Course		1
OR 601	Seminar in Operations Research	
Required Foundational Mathematical Modeling Course		3
Select one of the following courses:		
OR 505	Linear Programming	
or MA 505	Linear Programming	
or ISE 505	Linear Programming	
OR 506	Algorithmic Methods in Nonlinear Programming	
OR 709	Dynamic Programming	
or ISE 709	Dynamic Programming	
Core Courses ¹		12
Complete 12 credits associated with courses from the list below:		
BUS 790	Special Topics In Business Management	³
CE 537	Computer Methods and Applications	
CSC 505	Design and Analysis Of Algorithms	
CSC 762	Stochastic Simulation	
E 531	Dynamic Systems and Multivariable Control I	
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 708	Integer Programming	
ISE 709	Dynamic Programming	
ISE 723	Production Planning, Scheduling and Inventory Control	
ISE 754	Logistics Engineering	
ISE 760	Applied Stochastic Models in Industrial Engineering	
ISE 761	Queues and Stochastic Service Systems	
ISE 762	Stochastic Simulation	
ISE 772	Simulation Optimization	
MA 504	Introduction to Mathematical Programming	
MA 505	Linear Programming	
MA 531	Dynamic Systems and Multivariable Control I	
MA/ST 546	Probability and Stochastic Processes I	
MA 706	Nonlinear Programming	
MA 708	Integer Programming	
MA/ST 747	Probability and Stochastic Processes II	
OR 501	Introduction to Operations Research	
OR 504	Introduction to Mathematical Programming	
or OR 505	Linear Programming	
OR 506	Algorithmic Methods in Nonlinear Programming	
OR 531	Dynamic Systems and Multivariable Control I	

OR 537	Computer Methods and Applications
OR 560	Stochastic Models in Industrial Engineering
OR 562	Simulation Modeling
OR 706	Nonlinear Programming
OR 708	Integer Programming
OR 709	Dynamic Programming ¹
OR 760	Applied Stochastic Models in Industrial Engineering
OR 761	Queues and Stochastic Service Systems
OR 762	Stochastic Simulation
OR 772	Simulation Optimization
OR 766	Network Flows
ST 516	Experimental Statistics For Engineers II
ST 546	Probability and Stochastic Processes I
ST 706	Nonlinear Programming
ST 747	Probability and Stochastic Processes II
TE 562	Simulation Modeling

Elective Courses² 15

"Elective Courses" that will be applied to reach 31 credit hours will be determined in conjunction with the academic committee. Courses used to satisfy the required courses and core courses requirement cannot be used to satisfy the elective course requirement

Total Hours 31

¹ OR 505, OR 506, and OR 709 cannot be double counted. They can only count toward either Required Courses or the Additional Courses requirement.

² "Elective Courses" cannot be double counted if already used to fulfill the Required Courses or Core Courses requirements.

³ Students can earn a maximum of 6 core credits in BUS 790

Professors

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