Certificate in Manufacturing Systems

The Manufacturing Systems Certificate is for students looking to acquire more knowledge in manufacturing. Students completing this certificate will explore the design, analysis, and operation of manufacturing systems as a combination of humans, machinery, equipment, tooling, controls, building, transportation, etc., that are bound by a common material and information flow through application-based courses in state-of-the-art labs and classroom environments.

12 hours total

Required Courses

Code	Title	Hours
INSY 5330	Six Sigma	3
INSY 6330	Six Sigma	
INSY 5800	Lean Systems	3
INSY 6800	Lean Systems	
Total Hours		**6**

Choose 2 of the following

Code	Title	Hours
INSY 4960	Special Problems	1-5
INSY 4970	Industrial and Systems Engineering Special Topics	1-10
INSY 5240	Production and Inventory Control Systems	3
INSY 6240	Production and Inventory Control Systems	
INSY 5860	Innovations in Manufacturing Systems	3
INSY 6860	Innovations in Manufacturing Systems	
INSY 5830	Vehicle Technology and Trends	3
INSY 6830	Vehicle Technology and Trends	
INSY 5840	Control of the Manufacturing Floor and Processes	3
INSY 6840	Control of the Manufacturing Floor and Processes	
INSY 5850	Electronics Manufacturing Systems	3
INSY 6850	Electronics Manufacturing Systems	
INSY 5450	Simulation-based Planning and Scheduling	3
INSY 6450	Simulation-based Planning and Scheduling	

6xxx and 7xxxx-level courses are only for undergraduate students in the ABM program or for graduate students as part of the Graduate Certificate. Special Topics/Problems courses require Department Approval and only will count as credit towards the certificate based on the topic of the course. Students cannot take 5xxx and the corresponding 6xxx course and receive credit for both.

Lean Six Sigma Green Belt Certification

UG students who complete INSY 5800/6800, INSY 5330/6330, and INSY 4800 with a B average receive the certification.