

## Industrial Engineering – Professional Electives

### Purpose of Professional Electives

Professional electives are used to customize and tailor your degree program towards your career interests. In order to deepen your expertise in industrial and systems engineering, you should select at least three advanced level industrial engineering courses as professional electives.

ISEE-582	Lean Six Sigma Fundamentals
ISEE-626	Lean System Design
ISEE-640	Computer-Aided Design and Manufacturing
ISEE-684	Engineering and the Developing World
ISEE 701	Linear Programming
ISEE 702	Integer and Nonlinear Programming
ISEE 703	Supply Chain Management
ISEE 704	Logistics Management
ISEE 708	Simulation Analysis
ISEE 711	Advanced Simulation
ISEE 720	Production Control
ISEE 728	Production Systems Management
ISEE 730	Biomechanics
ISEE 731	Advanced Topics in Human Factors and Ergonomics
ISEE 732	Systems Safety Engineering
ISEE 734	Graduate Engineering Psychology
ISEE 740	Design for Manufacture and Assembly
ISEE 741	3D Printing
ISEE 742	Metal and Composite Additive Manufacturing
ISEE 743	Personalized 3D Printing
ISEE 750	Systems and Project Management
ISEE 752	Decision Analysis
ISEE 760	Design of Experiments
ISEE 761	Forecasting Methods
ISEE 770	Design Project Leadership
ISEE 771	Engineering of Systems I
ISEE 772	Engineering of Systems II
ISEE 773	Engineering Value Creation
ISEE 785	Fundamentals of Sustainable Engineering
ISEE 786	Lifecycle Assessment
ISEE 787	Design for the Environment
ISEE 789	Special Topics
ISEE 799	Independent Study