APPLIED  AESC  ENGINEERING  SCIENCES

College of Engineering

210  Global Systems:  Economics, Engineering, Environment
Spring.  3(3-0)  P:  EGR  102 or CSE 231 or CSE 220 R:  Not open to freshmen.  SA: EGR 210
Globalization as a process driven by economics, enabled by engineering, and constrained by the environment. Development of systems analysis tools for understanding how these themes interact globally. Enhancement of communication skills through teaming, presentations, and active listening.

310  Sustainable Systems Analysis
Fall. 3(0-3)  P:  (AESC 210 and (STT 315 or concurrently)) and completion of Tier I writing requirement R: Open to juniors or seniors in the College of Engineering or approval of department. SA: EGR 300, EGR 310
Concepts of sustainable systems; computational analysis tools for project management, life-cycle analysis, system-level representation, and six-sigma approaches. Case studies. Modeling and computational analysis.

410  System Methodology
Spring. 3(1-4)  P: (AESC 310) and completion of Tier I writing requirement R: Open to seniors in the Applied Engineering Sciences major. Approval of department; application required. SA: MSM 400, SYS 410, EGR 410
System analysis experience involving analysis tools and practices appropriate to the project, oral and written communication, professional ethics.

454  Technology Entrepreneurship
Fall, Spring. 3(3-0) Interdepartmental with Management. Administered by Management. P: MGT 352 or MKT 355 or EGR 310 R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management and open to seniors in the Applied Engineering Sciences major and not open to students in the School of Hospitality Business. Approval of department; application required.
Introduction to entrepreneurship. Learning how to leverage technological advances to develop business ideas. Focus on the creation process of high-growth technology ventures.