

ME 6250	Aircraft Conceptual Design	This course develops the aspects involved in the conceptual design of an aircraft. Focus is on the interplay between goals and constraints in the process of the design of a subsonic aircraft. Preq: ME 3080.
ME 6550	Design for Manufacturing	Concepts of product and process design for automated manufacturing are considered. Topics include product design for automated manufacturing, inspection and assembly, using automation, industrial robots, knowledge-based systems and concepts of flexible product manufacture.
ME 6570	Fundamentals of Wind Power	Introduces wind turbine systems, including wind energy potential and application to power generation. Topics include wind energy principles, wind site assessment, wind turbine components, power generation machinery control systems, connection to the electric grid, and maintenance. May also be offered as ME 6570. Students are expected to have completed a course comparable to ECE 2070 or ECE 3200 before enrolling in this course.
ME 6710	Computer-Aided Engineering Analysis & Design	Students are exposed to geometric and solid modeling, finite elements, optimization, and rapid-prototyping. Students design an artifact, represent it on the computer, analyze it using FEA, then optimize before prototyping it. Emphasizes the use of computer-based tools for engineering design. Coreq: ME 6711. Coreq: ME 6711.
ME 6711	Computer-Aided Engineering Analysis & Design Lab	Non-credit laboratory to accompany ME 6710. Coreq: ME 6710.
ME 6930	Selected Topics in Mechanical Engineering	Study of topics not found in other courses. May be repeated for a maximum of six credits, but only if different topics are covered. Preq: Consent of instructor.