

Graduate Council Report
May 2, 2013

New Course Requests

AERO 621. Aeromechanics of Wind Turbines. (3-0). Credit 3. Solid and fluid mechanics concepts applied to aerodynamics and aeroelasticity of wind turbine blades; failure analysis and structural design; composites and hybrid materials. Prerequisite(s): Graduate Classification.

ECEN 735. Electromagnetic Field Theory. (3-0). Credit 3. Methods in wave propagation, diffraction and scattering analysis, including surface waves, creeping waves, surface plasmons and complex environments; applications to macroscopic and nano technology such as optical wave propagation in materials and wireless device wave propagation. Prerequisite(s): ECEN 635 or equivalent.

ECEN 754. Optimization for Electrical and Computer Engineering Applications. (3-0). Credit 3. Principles of optimization, including linear and nonlinear optimization, as well as Electrical and Computer Engineering application in signal estimation, routing in communication networks, flows in wireless networks, wafer fabrication plants, and economic dispatch in power systems. Prerequisite(s): MATH 304 or 309 or 311; MATH 251 or Graduate Classification.

ISEN 631. Cognitive Systems Engineering. (3-0). Credit 3. Analyze how artifacts, displays, social interaction, and factors such as stress, time pressure, competing demands, and uncertainty affect human cognitive functions such as perception, attention, memory, decision-making, and problem-solving in joint human-machine systems. User-centered design techniques, research and evaluation methods introduced and applied to a design project. Prerequisite(s): ISEN 635, ISEN 430/630, or approval of instructor.

MEEN 620. Kinetic Processes in Materials Science. (3-0). Credit 3. Atomistic and mesoscale levels; foundation for microstructural evolution and behavior of materials; basic and irreversible thermodynamics; diffusion equations solutions; atomistic diffusion, nucleation; phase transformations: gas-solid, liquid-solid, and solid-solid reactions; FiPy (finite volume solver for PDE) to simulate kinetic processes. Prerequisite(s): MEEN 222 or equivalent materials science course; preliminary general thermodynamics course is not necessary. Cross-listed with MEEN 620.

MSEN 620. Kinetic Processes in Materials Science. (3-0). Credit 3. Atomistic and mesoscale levels; foundation for microstructural evolution and behavior of materials; basic and irreversible thermodynamics; diffusion equations solutions; atomistic diffusion, nucleation; phase transformations: gas-solid, liquid-solid, and solid-solid reactions; FiPy (finite volume solver for PDE) to simulate kinetic processes. Prerequisite(s): MEEN 222 or equivalent materials science course; preliminary general thermodynamics course is not necessary. Cross-listed with MSEN 620.

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Course Change Requests

ATTR 652: Clinical Education II

PREREQUISITE(S):

FROM: ATTR 651

TO: ATTR 651, ATTR 660, ATTR 661 with grades of "C" or better.

ATTR 653: Clinical Education III

PREREQUISITE(S):

FROM: ATTR 652

TO: ATTR 652, ATTR 662, ATTR 663, ATTR 668, ATTR 669 with grades of "C" or better.

ATTR 654: Clinical Education IV

PREREQUISITE(S):

FROM: ATTR 653

TO: ATTR 653 with grade of "C" or better.

ATTR 655: Clinical Education V

PREREQUISITE(S):

FROM: ATTR 654

TO: ATTR 654, ATTR 664, ATTR 665, ATTR 671 with grades of "C" or better.

ATTR 656: Clinical Education VI

PREREQUISITE(S):

FROM: ATTR 655

TO: ATTR 655, ATTR 666, ATTR 667, ATTR 670 with grades of "C" or better.

CPSY 630: Foundations of Counseling

TITLE:

FROM: Foundations of Counseling

TO: Foundations of School Counseling

DESCRIPTION:

FROM: Philosophical, psychological, and sociological concepts fundamental to counseling and related helping professions in public and mental health settings.

TO: Philosophical, psychological, and sociological concepts fundamental to counseling in schools.

CREDIT HOURS:

FROM: Lecture: 4, Lab: 0, SCH: 4

TO: Lecture: 3, Lab: 0, SCH: 3