

TO: The Engineering Faculty
FROM: The Faculty of the School of Electrical and Computer Engineering
RE: Deletion of ECE 651, 652, & 657

The faculty of the School of Electrical and Computer Engineering has approved the deletion of the following courses. This action is now submitted to the Engineering Faculty with a recommendation for approval.

ECE 651 Magnetism

Sem. 2. Class 3, cr. 3. (Offered in alternate years.)
Prerequisite: ECE 311 or consent of instructor.

Diamagnetism, paramagnetism, ferro-, ferri-, and antiferromagnetism. Fine particles and applications to permanent magnets and tape recording. Domains and domain walls. Models of thin film and bulk material magnetic flux reversal processes. Computer magnetism. Circuits containing nonlinear magnetic elements.

ECE 652 Wave Phenomena in Solids

Sem. 2. Class 3, cr. 3. (Offered in alternate years.)
Prerequisite: ECE 604.

The course is designed to introduce graduate students to advanced concepts in wave propagation, coupling, and excitation. Maxwell's equation in anisotropic media, reflection at interfaces, optical waveguides and fibers, perturbation theory, waveguide couplers, parametric oscillators, special topics.

ECE 657 Computer-Aided Modeling of Semiconductor Processes and Devices

Class 3, cr. 3. (Offered every third semester.)
Prerequisite: ECE 606 or equivalent and proficiency in FORTRAN.

Computer simulation programs are commonly used by engineers to assist in development and analysis of semiconductor devices. The models and methods used in state-of-the-art process and device simulators are discussed. Numerical solutions of the classical semiconductor equations with application to specific devices are emphasized.

Reason: The contents of these courses are subsumed by other course offerings in the School of Electrical and Computer Engineering. ECE 651, 652, and 657 were last offered in the Spring 1986, Spring 1994, and Spring 1996 semesters, respectively.

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Professor and Interim Head