

**Graduate Council Report**  
**September 4, 2014**

**New Course Request:**

**BMEN 606.** Medical Device Path to Market. (3-0). Credit 3. Path to market for a medical device with specific attention to regulatory affairs to enable the development of an appropriate regulatory strategy due to the highly regulated global environment. Prerequisite(s): Graduate classification or approval of instructor. Stacked with BMEN 406.

**MARA 673.** International Maritime Industry Graduate Management Experience. (3-0). Credit 3. Combines classroom and graduate research work with international travel and provides the student direct contact with maritime industry managers. The trip emphasizes cultural and historical aspects of the maritime industry outside of the United States providing a better understanding of differing management styles, business practices and regulatory focus. Prerequisite(s): Graduate classification. Stacked with MARA 493.

**MSEN 612.** Fundamentals of Transmission Electron Microscopy. (2-6) Credit 3. State-of-the-art fundamentals in TEM; theoretical background supporting a strong hands-on course component comprising specimen preparation and image acquisition/interpretation; practical experience to attain a proficiency level permitting independent operation of one of the transmission electron microscopes in the Microscopy and Imaging Center. Prerequisite(s): Graduate classification or approval of instructor. Cross-listed with BIOL 602.

**MSEN 613.** Advanced Transmission Electron Microscope (TEM) Methodologies in Life and Materials Science (TEM II). (1-6). Credit 3. Advanced TEM methodologies, including specimen preparation and TEM imaging/analysis techniques as applicable to both biological and material samples; theory designed to support a strong hands-on component comprising specimen preparation, different imaging/diffraction/spectroscopic techniques and data interpretation. Prerequisite(s): BIOL 602/MSEN 612. Cross-listed with BIOL 603.

**MSEN 614.** Fundamentals of Scanning Electron Microscopy (SEM) and Environmental Scanning Electron Microscopy (ESEM). (1-3). Credit 2. Provides biologists, material scientists, and students from other disciplines with the techniques of operation of the scanning electron microscope (SEM) and the environmental SEM (ESEM) coupled with the appropriate theoretical background knowledge; individual instruction in support of their research endeavors involving SEM/ESEM. Prerequisite(s): Graduate classification. Cross-listed with BIOL 604.

**MSEN 618.** Composite Materials Processing and Performance. (3-0). Credit 3. Fundamental science and design; processing and design interaction regarding multiphase composites; processing science, experimental characterization, laminate analysis; design structure and processing. Prerequisite(s): Elasticity, continuum mechanics, or equivalent; graduate classification. Cross-listed with MEEN 686. Stacked with MEEN 471.

**MSEN 626.** Polymers Laboratories. (2-3). Credit 3. Introduction to basic experimental skills relating to polymers; experiments include polymerization, molecular weight determination, FTIR, tensile test, NMR, DSC, swelling index, viscosity, x-ray diffraction. Prerequisite(s): Graduate classification. Cross-listed with MEEN 606.

**Graduate Council Report**  
**September 4, 2014**

**SOCI 640.** Sociology of Development. (3-0). Credit 3. Survey of sociology of development; review of major classical and contemporary approaches to development including but not limited to modernization theory, world systems theory, comparative nationalism, demographic theories, feminist approaches; Contradictions of development including K-Cycles, social movements and ecological constraints. Prerequisite(s): Graduate classification or approval of instructor.

**SPED 603.** Foundations of Special Education. (3-0). Credit 3. Build a knowledge base to understand the historical and conceptual foundations of special education; familiarization with special education literature; provide an overview of current issues and trends impacting special education. Prerequisite(s): Graduate classification or approval of instructor/department head.

**Graduate Council Report  
September 4, 2014**

**Course Change Request:**

**BIOL 611: Molecular Biology of Differentiation and Development**

**COURSE TITLE:**

**FROM: Molecular Biology of Differentiation and Development.**

**TO: Developmental Genetics**

**Graduate Council Report**  
**September 4, 2014**

**Special Consideration Items:**

Dwight Look College of Engineering

MEng in Engineering

Request to offer existing degree via distance education

Mays Business School

Department of Finance

Master of Financial Management

Request for a new degree program