Energy Management

**ENGY 6009** Energy Management Internship (0 semester credit hours) Student gains experience and improves skills through appropriate developmental work assignments in a real business environment. Student must identify and submit specific business learning objectives at the beginning of the semester. The student must demonstrate exposure to the managerial perspective via involvement or observation. At semester end, student prepares an oral or poster presentation, or a written paper reflecting on the work experience. Student performance is evaluated by the work supervisor. Pass/Fail only. Prerequisites: (MAS 6102 or MBA major) and department consent required. (0-0) S

**ENGY 6330** Energy Law and Contracts (3 semester credit hours) This course provides an introductory overview of U.S. and international energy laws that govern oil, natural gas, coal, nuclear, renewable energy, and electric generation. The course covers the history of energy regulation and explores current laws governing the use, production, and transmission of energy sources, as well as environmental regulations. (3-0) S

**ENGY 6331** Capstone Project in Energy (3 semester credit hours) Capstone projects are experiential learnings sponsored by local industries and provide the students an opportunity to apply the skills and knowledge gained in core courses to solve real world challenging problems or simulated projects in the area of energy management. Students work in a team environment, interact with industry leaders and gain some industry specific knowledge. Prerequisites: **FIN 6335** and **FIN 6336** and **MECO 6318** and **OPRE 6389** and (MAS 6102 or MBA major). (3-0) Y

**ENGY 6332** Energy and Sustainability (3 semester credit hours) The energy industry and energy consumers are undergoing a transition with more consumers and businesses seeking ways to reduce their carbon footprint and establish a "green" brand. In other words, they are seeking more sustainable ways of meeting their energy needs. The course discusses major shifts in the global energy industry and the impact shifts in public perception are having on international and domestic energy policies, the environment, and corporate and government sustainability initiatives. Students will be asked to evaluate existing challenges to increased sustainability initiatives worldwide and to identify opportunities for increased sustainability in relation to economic growth. The course addresses so-called sustained development, that is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (3-0) Y

**ENGY 6335** Power Industry: Finance, Economics and Markets (3 semester credit hours) Providing reasonably priced electric power to residences and industries is a priority for every nation. This course introduces the power industry, beginning from the power plants and moving along the entire value chain all the way to distribution. The course covers public/private utilities, costs, revenues, guarantees on returns as well as government granted service area monopolies, franchised utilities, and independent power producers. Financing of power projects via equity and/or debt and tax subsidies are discussed. Electric grid and power marketing schemes are studied, both domestically and internationally. Federal and local regulations and their effects on rate-making are presented. (3-0) Y

**ENGY 6336 (FIN 6336)** Energy Joint Interest Accounting (3 semester credit hours) This course explores and discusses the special accounting rules for the energy industries and their special tax treatment. Prerequisite: **AC CT 6301** or **ACCT 6305**. (3-0) R

**ENGY 6362 (IMS 6362 and OPRE 6362 and SYSM 6311)** Project Management in Engineering and Operations (3
semester credit hours) Project Management in Engineering and Operations (3 semester credit hours) Project management is the discipline of planning, organizing and managing resources to bring about the successful completion of specific project goals and objectives. The course will cover various aspects of managing projects in engineering and operations environments including the critical path methods for planning and controlling projects, time and cost tradeoffs, resource utilization, organizational design, conflict resolution and stochastic considerations. (3-0) S

**ENGY 6V98** Energy Management Internship (1-3 semester credit hours) Student gains experience and improves skills through appropriate developmental work assignments in a real business environment. Student must identify and submit specific business learning objectives at the beginning of the semester. The student must demonstrate exposure to the managerial perspective via involvement or observation. At semester end, student prepares an oral or poster presentation, or a written paper reflecting on the work experience. Student performance is evaluated by the work supervisor. Pass/Fail only. May be repeated for credit (3 semester credit hours maximum). Prerequisites: (MAS 6102 or MBA major) and department consent required. ([1-3]-0) S

**ENGY 6V99** Special Topics in Energy Management (1-6 semester credit hours) May be lecture, readings, or individualized study. May be repeated for credit as topics vary (6 semester credit hours maximum). Instructor consent required. ([1-6]-0) S