Energy Engineering BS Degree
Curriculum
As of Fall 2013

EEN ELECTIVES
(4 courses, 12 credit hours)
ECE 42700 Power Electronics (3 cr.)
ME 50000 Advanced Thermodynamics (3 cr.)
ME50400 Automotive Control (3 cr.)
ME 59700 Energy Storage Devices and Systems (3 cr.)
ME 59700 Fuel Cell Science & Engineering (3 cr.)
ME 59700 Dynamics and Simulation of Hybrid-electric vehicles (3 cr.)
ME 50101 Energy Assessment of Industrial Processes (3 cr.)
ME 50102 Energy Management Principles (3 cr.)
ME 50103 Industrial Energy Assessment: Tools & Applications (3 cr.)
ME 50104 Powertrain Integration (3 cr.)
ME 50105 Hybrid and Electric Transportation (3 cr.)
ME 59700 Ceramics material for Renewable Energy (3 cr.)

TECHNICAL ELECTIVES
(2 courses, 6 credit hours)
ME 32600 Engineering Project Management (3 cr.)
ME 41400 Thermal-Fluid Systems (3 cr.)
ME 34400 Introduction to Engineering Materials (3 cr.)
ME 37200 Design of Mechanisms (3 cr.)
ME 43300 Principles of Turbomachinery (3 cr.)
ME 50500 Intermediate Heat Transfer (3 cr.)
ME 50900 Intermediate Fluid Mechanics (3 cr.)
ME 51000 Gas Dynamics (3 cr.)
ME 52500 Combustion (3 cr.)
ME 54600 CAD/CAM – Theory and Advanced Applications (3 cr.)
ME 55000 Advanced Stress Analysis (3 cr.)
ME 55100 Finite Element Analysis (3 cr.)
ME 55200 Advanced Applications of Finite Element Methods (3 cr.)
ME 56300 Mechanical Vibrations (3 cr.)
ME 56900 Mechanical Behavior of Materials (3 cr.)
ME 58100 Numerical Methods in Mechanical Engineering (3 cr.)
ME 59700 Nanosystems Principles (3 cr.)
ME 59700 Integrated Nanosystems Processed and Devices (3 cr.)
ME 59700 Selected Topics in Mechanical Engineering (3 cr.)
ME 59700 Introduction to Friction & Wear (3 cr.)
ME 59700 Analysis & Design of Robotic Manipulators (3 cr.)
ME 59700 Topology Optimization (3 cr.)
ME C18400,C28400,C38400,C48300,C48400 Cooperative Education Practice I-V (1 cr.)
ME I18400,I28400,I38400,I48300,I48400 Career Enrichment Internship I-V (1 cr.)
STAT 35000 Introduction to Statistics (3 cr.)

*Please note EEN students cannot take ME 54200; Introduction to Renewable Energy.

1 REVISED: 09/29/2014