MECHANICAL ENGINEERING BSME
ADVANCED ENGINEERING ELECTIVES (LIST 1)

A minimum of six credits must be selected from this list.
(Up to 12 credits may be selected from this list)
Courses are three credits except where noted.
Courses are typically taken senior year of degree.
Most courses are offered on a two year cycle except where noted.

Mechanical Engineering

627 Automotive Design* - Sorem
633 Basic Biomechanics* - Fischer
636 Internal Combustion Engines – Depcik
637 Steam Power Plants – Dougherty
639 Alternative Energy Systems – TenPas
696 Design for Manufacturability – Maletsky
702 Mechanical Engineering Analysis – Dougherty or Yang
712 Advanced Engineering Thermodynamics – Dougherty
716 Introduction to Surface and Interface Science – Kwon
718 Fundamentals of Fuel Cells – Li
720 Advanced Dynamics of Machinery – Maletsky
722 Modeling Dynamics of Mechanical Systems – Luchies
733 Gas Dynamics – TenPas
736 Catalyst Modeling – Depcik
750 Biomechanics of Human Motion – Luchies
751 Experimental Methods of Biomechanics – Luchies
752 Acoustics – Yang
753 Bone Biomechanics – Fischer
754 Biomedical Optics – Yang
755 Computer Simulation in Biomechanics - Fischer
757 Biomechanical Systems – Wilson
758 Physiological System Dynamics – Wilson
760 Biomedical Product Development* - Friis
765 Biomaterials* - Friis
767 Molecular Biomimetics – Tamerler
770 Conductive Heat Transfer – Dougherty
774 Radiative Heat Transfer – Bergman
788 Optimal Estimation – Fang
789 Energy Storage Systems and Control – Fang
790 Special Topics (1-5 credits)
790 Advanced Heat and Mass Transfer – Bergman
790 Materials Engineering for Electrochemical Energy Storage and Conversion – Liu
790 Hybrid and Electric Vehicle Modeling – Depcik
790 Biomedical Microdevices – Soper
790 Fundamentals of Num Heat & Mass Transfer – Li
797 Materials for Energy Applications – Liu
798 Manufacturing for Energy Applications – Liu

* Indicates course taught on a yearly basis.

7/11/2018