

# MECHANICAL ENGINEERING BSME ADVANCED ENGINEERING ELECTIVES (LIST 1)



A minimum of six credits must be selected from this list.

(Up to 13 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**

590	Special Topics (1-5 credits)	751	Experimental Methods of Biomechanics - Luchies
627	Automotive Design* - Sorem	752	Acoustics - Yang
633	Basic Biomechanics* - Fischer	753	Bone Biomechanics - Fischer
636	Internal Combustion Engines – Depcik	754	Biomedical Optics - Yang
637	Steam Power Plants - Dougherty	755	Computer Simulation in Biomechanics - Fischer
639	Alternative Energy Systems - Tenpas	756	Biofluid Dynamics - Kieweg
696	Design for Manufacturability - Maletsky	757	Biomechanical Systems - Wilson
702	Mechanical Engineering Analysis - Dougherty	758	Physiological System Dynamics - Wilson
708	Microcomputer Applications in M.E. - Faddis	760	Biomedical Product Development* - Friis
711	Bearings and Bearing Lubrication - Yimer	765	Biomaterials* - Friis
712	Advanced Engineering Thermodynamics – Yimer	770	Conductive Heat Transfer - Yimer
714	Thin Film Flow - Kieweg	774	Radiative Heat Transfer - Yimer
720	Advanced Dynamics of Machinery - Maletsky	790	Special Topics (1-5 credits)
722	Modeling Dynamics of Mechanical Systems - Luchies	790	Advanced Heat and Mass Transfer – Bergman
733	Gas Dynamics - Tenpas	790	Materials Engineering for Electrochemical Energy Storage and Conversion – Liu
736	Catalyst Modeling - Depcik	790	Hybrid and Electric Vehicle Modeling – Depcik
750	Biomechanics of Human Motion - Luchies	790	Molecular Scale Understanding of Natural and Biologically-Engineering Materials - Tamerler

\* Indicates course taught on a yearly basis.