WRIGHT STATE UNIVERSITY

B.S. in Mechanical Engineering & Material Science and Engineering

NOTE: The course offerings listed below are tentative and subject to change at any time.

The most up-to-date list can be found on the Department website at
http://www.engineering.wright.edu/mme/current-students.shtml

Approved List of Technical Electives (TE) for Mechanical Engineers							Fa	Wi	Sp	Su
CS	317	d	4.0	____	____	Numerical Methods for Digital Computers II ..... (MTH 235)	•	a	•	•
EE	303	d	3.0	____	____	Circuit Analysis II ..... (EE 301, EE 302, EE 304c)	•	a	a	•
EE	304	d	1.0	____	____	Circuit Analysis II Laboratory ..... (EE 303c)	•	a	a	•
EE	415	d	3.0	____	____	Control Systems II ..... (EE 413, EE 414, EE 416c)	•	a	•	•
EE	416	d	1.0	____	____	Control Systems II Laboratory ..... (EE 415c)	•	a	•	•
EP	322	d	4.0	____	____	Applied Optics ..... (MTH 235 or MTH 253, PHY 244)	•	a	•	•
ME	405	d	4.0	____	____	Kinematics and Design of Mechanisms ..... (ME 213)	•	•	a	•
ME	417	d	3.0	____	____	Mechanics of Viscous Fluids ..... (ME 317)	a	•	•	•
ME	423	d	4.5	____	____	Energy Conversion ..... (ME 316)	a	•	•	•
ME	424	d	4.0	____	____	Solar Engineering ..... (ME 318)	•	•	a	•
ME	426	d	4.5	____	____	Wind Power ..... (ME 317)	•	•	a	•
ME	427	d	4.5	____	____	Electrochemical Storage Systems and Principles ..... (ME 315 and Note 12)	a	•	•	•
ME	428	d	4.5	____	____	Fuel Cell Science and Technology ..... (ME 315 and Note 12, ME 370)	a	•	•	•
ME	430	d	4.0	____	____	Aeronautics ..... (ME 317)	a	•	•	•
ME	431	d	4.0	____	____	Aerospace Propulsion ..... (ME 317)	a	•	•	•
ME	433	d	4.0	____	____	Compressible Fluid Flow ..... (ME 317)	a	•	•	•
ME	434		4.0	____	____	Computational Fluid Dynamics ..... (ME 317)	a	•	•	•
ME	442	d	3.0	____	____	Vehicle Engineering ..... (ME 213)	•	a	a	•
ME	456	d	4.0	____	____	Introduction to Robotics ..... (MTH 235; senior standing; Prof. in FORTRAN, Pascal or C)	a	•	•	a
ME	469	d	4.5	____	____	Computational Materials Science ..... (ME 370)	•	a	•	•
ME	470	d	4.0	____	____	Failure Analysis ..... (ME 313, ME 371)	•	a	•	•
ME	474	d	4.0	____	____	Materials Selection for Mechanical Design ..... (ME 313, ME 370)	a	•	•	•
ME	477	d	4.0	____	____	Mechanical Behavior Materials ..... (ME 313, ME 371)	a	•	•	•
ME	486	d	4.0	____	____	Deformation Processing ..... (ME 313, ME 371)	•	•	a	•
ME	487	d	4.0	____	____	Machining ..... (ME 371, ME 487Lc)	a	•	•	•
ME	499		1-4.0	____	____	Special Problems ..... (Department Permission)	a	a	a	a

Approved List of Materials Related Electives (MR) for Material Science Engineers							Fa	Wi	Sp	Su
EP	322	d	4.0	____	____	Applied Optics ..... (MTH 235 or MTH 253, PHY 244)	•	a	•	•
ME	317	d	4.0	____	____	Fluid Dynamics ..... (ME 213, ME 315)	•	a	a	•
ME	318	d	4.0	____	____	Heat Transfer ..... (ME 317, MTH 235)	•	a	a	•
ME	412	d	4.0	____	____	Finite Element Analysis ..... (ME 313, ME 412Lc, MTH 235)	•	a	a	a
ME	414	d	4.0	____	____	Mechanical Design I ..... (ME 313)	a	•	a	•
ME	427	d	4.5	____	____	Electrochemical Storage Systems and Principles ..... (ME 315 and Note 12)	a	•	•	•
ME	428	d	4.5	____	____	Fuel Cell Science and Technology ..... (ME 315 and Note 12, ME 370)	a	•	•	•
ME	469	d	4.5	____	____	Computational Materials Science ..... (ME 370)	•	a	•	•
ME	471	d	4.0	____	____	Non Destructive Evaluation ..... (ME 376, ME 477)	a	•	•	•
ME	481	d	4.0	____	____	Materials Characterization ..... (ME 371)	•	a	•	•
ME	482	d	4.0	____	____	Transmission Electron Microscopy ..... (ME 371)	•	•	a	•
ME	486	d	4.0	____	____	Deformation Processing ..... (ME 313, ME 371)	•	•	a	•
ME	487	d	4.0	____	____	Machining ..... (ME 371)	a	•	•	•
ME	488	d	4.0	____	____	Powder Processing of Materials ..... (ME 375)	•	•	a	•
ME	489	d	4.0	____	____	Engineering Plastics ..... (ME 472)	a	•	a	•
ME	499		1-4.0	____	____	Special Problems ..... (Department Permission)	a	a	a	a