

**Mechanical Engineering Department
Proposed Technical Electives Schedule
Spring 2011 – Summer 2013**

December 16, 2010

| SEMESTER | COURSE # (HOURS) | COURSE NAME | Pre-Requisites |
|-------------|-------------------|--|--|
| Spring 2011 | MECH 4310 (3) | Heating, Ventilating, Air Conditioning, and Refrigeration (Dyer) | Pr: MECH3040 |
| Spring 2011 | MECH 4430 (3) | Vehicle Design (Jones) | Pr: MECH3130 |
| Spring 2011 | MECH 5220 (3) | Virtual Prototyping (Beale) | Pr: MECH3131, MECH2220 |
| Spring 2011 | MECH 5310 (3) | Mechanics of Electronic Packaging (Suhling) | Pr: MECH3130, ELEC3810 |
| Spring 2011 | MECH 5390 (3) | Fundamentals of the Finite Element Method (Lall) | Pr: MECH3040, MECH3130, MATH2660 |
| Spring 2011 | MECH 5510 (3) | Engineering Acoustics (Crocker) | Pr: MATH2650 |
| Spring 2011 | MECH 5610 (3) | Mechanical Vibration (Sinha) | Pr: MECH2120, MATH 2650, MATH2660 |
| Spring 2011 | MECH 5970-004 (3) | Design of Feedback Control for Dynamic Systems (Choe) | Pr: MECH3140 |
| Spring 2011 | MECH 5970-014 (3) | Renewable Energy Resources and Applications (Mackowski / Bhavnani) | Pr: Pr: ENGR2010 or ENGR2200 or inst. permission |
| Spring 2011 | MECH 5970-017 (3) | Advanced Manufacturing Concepts (Payton) | Pr: MATL2100 |
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| Summer 2011 | MECH 4300 (3) | Mechanical Equipment Engineering (Dyer) | Pr: MECH3020 |
| Summer 2011 | MECH 4410 (3) | Engines (Jones) | Pr: ENGR2010, MECH3030 |
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| Fall 2011 | MECH 4430 (3) | Vehicle Design (Jones) | Pr: MECH3130 |
| Fall 2011 | MECH 5230 (3) | Friction, Wear and Lubrication (Jackson) | Pr: MECH3030, MECH3130, MECH3230 |
| Fall 2011 | MECH 5430 (3) | Basics of Sensor Applications (Thakur) | Pr: MECH3130 |
| Fall 2011 | MECH 5710 (3) | Kinematics and Dynamics of Robots (Marghitu) | Pr: MECH3140 |
| Fall 2011 | MECH 5810 (3) | Mechatronics (Choe) | Pr: MECH2120, ELEC3810 |
| Fall 2011 | MECH 5970-004 (3) | Hybrid & Fuel Cell Systems & Components (Choe) | Pr: MECH5810 |
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| Spring 2012 | MECH 4310 (3) | Heating, Ventilating, Air Conditioning, and Refrigeration (Dyer) | Pr: MECH3040 |
| Spring 2012 | MECH 4420 (3) | Vehicle Dynamics (Bevly) | Pr: MECH2120, MECH3030 |
| Spring 2012 | MECH 5210 (3) | Electronics Thermal Management (Bhavnani) | Pr: MECH3040, ELEC3810 |
| Spring 2012 | MECH 5220 (3) | Virtual Prototyping (Beale) | Pr: MECH3131, MECH2220 |
| Spring 2012 | MECH 5390 (3) | Fundamentals of the Finite Element Method (Lall) | Pr: MECH3040, MECH3130, MATH2660 |
| Spring 2012 | MECH 5510 (3) | Engineering Acoustics (Crocker) | Pr: MATH2650 |
| Spring 2012 | MECH 5610 (3) | Mechanical Vibration (Sinha) | Pr: MECH2120, MATH 2650, MATH2660 |
| Spring 2012 | MECH 5970-004 (3) | Design of Feedback Control for Dynamic Systems (Choe) | Pr: MECH3140 |
| Spring 2012 | MECH 5970-017 (3) | Advanced Manufacturing Concepts (Payton) | Pr: MATL2100 |
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|-------------|-------------------|---|-------------------------|--|
| Summer 2012 | MECH 4300 (3) | Mechanical Equipment Engineering | (Dyer) | Pr: MECH3020 |
| Summer 2012 | MECH 4410 (3) | Engines | (Jones) | Pr: ENGR2010, MECH3030 |
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| Fall 2012 | MECH 4430 (3) | Vehicle Design | (Jones) | Pr: MECH3130 |
| Fall 2012 | MECH 5230 (3) | Friction, Wear and Lubrication | (Jackson) | Pr: MECH3030, MECH3130, MECH3230 |
| Fall 2010 | MECH 5300 (3) | Advanced Mechanics of Materials | (Tippur) | Pr: MECH3130 |
| Fall 2012 | MECH 5430 (3) | Basics of Sensor Applications | (Thakur) | Pr: MECH3130 |
| Fall 2012 | MECH 5710 (3) | Kinematics and Dynamics of Robots | (Marghitu) | Pr: MECH3140 |
| Fall 2012 | MECH 5810 (3) | Mechatronics | (Choe) | Pr: MECH2120, ELEC3810 |
| Fall 2012 | MECH 5970-003 (3) | Renewable Energy Resources and Applications | (Bhavnani / Mackowski) | Pr: Pr: ENGR2010 or ENGR2200 or inst. permission |
| Fall 2012 | MECH 5970-004 (3) | Hybrid & Fuel Cell Systems & Components | (Choe) | Pr: MECH5810 |
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| Spring 2013 | MECH 4310 (3) | Heating, Ventilating, Air Conditioning, and Refrigeration | (Dyer) | Pr: MECH3040 |
| Spring 2013 | MECH 4420 (3) | Vehicle Dynamics | (Bevly) | Pr: MECH2120, MECH3030 |
| Spring 2013 | MECH 5010 (3) | Compressible Fluid Flow | (Khodadadi) | Pr: MECH3020, MECH3030 |
| Spring 2013 | MECH 5220 (3) | Virtual Prototyping | (Beale) | Pr: MECH3131, MECH2220 |
| Spring 2013 | MECH 5310 (3) | Mechanics of Electronic Packaging | (Suhling) | Pr: MECH3130, ELEC3810 |
| Spring 2013 | MECH 5390 (3) | Fundamentals of the Finite Element Method | (Lall) | Pr: MECH3040, MECH3130, MATH2660 |
| Spring 2013 | MECH 5510 (3) | Engineering Acoustics | (Crocker) | Pr: MATH2650 |
| Spring 2013 | MECH 5610 (3) | Mechanical Vibration | (Sinha) | Pr: MECH2120, MATH 2650, MATH2660 |
| Spring 2013 | MECH 5970-004 (3) | Design of Feedback Control for Dynamic Systems | (Choe) | Pr: MECH3140 |
| Spring 2013 | MECH 5970-017 (3) | Advanced Manufacturing Concepts | (Payton) | Pr: MATL2100 |
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| Summer 2013 | MECH 4300 (3) | Mechanical Equipment Engineering | (Dyer) | Pr: MECH3020 |
| Summer 2013 | MECH 4410 (3) | Engines | (Jones) | Pr: ENGR2010, MECH3030 |
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