Class Schedule - Fall 2015

Mechanical Engineering

ME 404  **Intermediate Thermodynamics**  credit: 4 hours.
Classical thermodynamics, including the TdS equations and the Maxwell relations; development of thermodynamic property relations, behavior of real gases, thermodynamics of mixtures, phase equilibrium and chemical reactions and equilibrium with an emphasis on combustion reactions; statistical thermodynamics including the effect of molecular and atomic structure, statistical concepts and distributions, calculation of thermodynamic properties of gas-phase atoms and molecules, kinetic theory of gases, and vibrations in crystals and the electron gas in metals; selected applications. 4 undergraduate hours. 4 graduate hours. Credit is not given for both ME 404 and any of PHYS 427, CHEM 442, or CHEM 444. Prerequisite: ME 300.

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<tr>
<td>30302</td>
<td>Lecture-Discussion</td>
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<td>01:00 PM - 02:50 PM</td>
<td>TR</td>
<td>218 - Mechanical Engineering Bldg</td>
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