

COURSES IN SOLID MECHANICS
AEM, CE, and ME
Fall 2008 -- Spring 2010

| Course | Name | Frequency | Fall 2008 | Spring 2009 | Fall 2009 | Spring 2010 |
|-------------------|---|--|-----------|-------------|-----------|-------------|
| AEM4502 | Computational Structural Analysis | Every Fall | ✓ | | ✓ | |
| AEM4511 | Mechanics of Composite Materials | Every Spring | | ✓ | | ✓ |
| AEM4581 | Mechanics of Solids | | ✓ | | | |
| AEM5501 | Continuum Mechanics | Every Fall | ✓ | | ✓ | |
| AEM5503 | Theory of Elasticity | Every Spring | | ✓ | | ✓ |
| AEM8511 | Advanced Topics in Continuum Mechanics | | | | | |
| AEM 8521 | Advanced Topics in Elasticity | | ✓ | | | |
| AEM 8541 | Theory of Crystalline Solids | | | | ✓ | |
| AEM 8551 | Multiscale Analysis: Bridging Length and Time Scales | | | ✓ | | |
| AEM8531 | Fracture Mechanics | | | | | ✓ |
| AEM8533 | Theory of Plasticity | | ✓ | | | |
| CE5411 | Applied Structural Mechanics | Every Fall | ✓ | | ✓ | |
| CE8401 | Fundamentals of Finite Element Method | Every Spring | | ✓ | | ✓ |
| CE8402 | Nonlinear Finite Element Analysis | Every other year | | | ✓ | |
| CE8411 or CE 8412 | Plates or Shells | Every 4 th year (approx) | ✓ | | | |
| CE8421 | Structural Dynamics | Every Fall | ✓ | | ✓ | |
| CE8431 | Structural Stability | Every other Spring | | | | ✓ |
| CE8443 | Fracture Mechanics | Either every year or every other (not decided yet) | | ✓ | | ✓ |
| CE8490 | Optimization and Uncertainty Quantification in Computational Structural Mechanics | Every other Fall | ✓ | | | |
| ME5223 | Materials in Design | Every Fall | ✓ | | ✓ | |
| ME 5228 | Introduction to Finite Elements: Modeling, Analysis & Design | Every Fall | ✓ | | ✓ | |
| ME 8228 | Finite Elements in Multi-Disciplinary Flow /Thermal / Stress & Manufacturing | Every Other Year in Spring | | | | ✓ |
| ME 8229 | Finite Element Methods for Computational Mechanics: Transient/ Dynamic Problems | Every Other Year in Spring | | ✓ | | |
| ME 8243 | Topics in Design | To be determined | | | | |
| ME 8253 | Computational Nanomechanics | Every Spring | | ✓ | | ✓ |