

**NORTH CAROLINA STATE UNIVERSITY  
ENERGY MANAGEMENT DIPLOMA PROGRAM  
MCKIMMON CENTER - RALEIGH, NC  
DECEMBER 2012 THRU JUNE 2013**

<b>SESSION</b>	<b>WEEKDAY</b>	<b>DATE</b>	<b>TOPICS</b>	<b>INSTRUCTOR</b>
<b><u>EM-I Managing Energy for Greater Profitability</u></b>				
1	Tuesday	12/18/12	Energy Industry Overview Understanding Electric Utility Rates Renewable Energy Legislation, Codes & Standards	Mull Mull Rees Mull
2	Wednesday	12/19/12	Energy Surveying & Instrumentation Metrics - Evaluating Energy Information What Makes an Effective EM Program Survey Planning & Organization Evaluating Energy Initiatives (Calculations)	Mull Mull Mull Mull Mull
3	Tuesday	01/15/13	Economic Evaluation Techniques Procurement of Fuels (Natural Gas) Performance Contracting	Mull Shaw Len Hoey
4	Wednesday	01/16/13	Strategic Planning for Energy Management Energy Rates/Calculation (Review)	Mull Mull
5	Wednesday	02/20/13	Developing & Implementing Energy Projects Understanding the Workplace Culture Techniques of Working with People Energy Review - Class Problems	Mull Mull Mull Mull
<b><u>EM-II Improving Equipment Efficiency</u></b>				
6	Thursday	02/21/13	Electric Motors & Power Quality	Lawrence
7	Tuesday	03/26/13	Fundamentals of Energy Efficient Lighting	Mull
8	Wednesday	03/27/13	Fundamentals of HVAC Systems Thermal Energy Storage Systems Geothermal Heat Pumps	Mull Mull Mull
9	Tuesday	04/23/13	Chillers/Cooling Towers/Heat Exchangers Compressed Air Systems	Turpish Mull
10	Wednesday	04/24/13	Boilers and Steam Systems Commercial/Industrial Ventilation	Eckerlin Gunnell
<b><u>EM-III Industrial &amp; Commercial Process and Building Analysis</u></b>				
11	Tuesday	05/21/13	Process Energy Analysis/Cogeneration	Harrell
12	Wednesday	05/22/13	DDC Control, Spec., Procurement & Commissioning	Santos
13	Wednesday	06/19/13	Building Envelope Analysis Steam Traps Heat Recovery Systems Energy Rates/Calculation (Review)	Martin Mull Mull Mull
14	Thursday	06/20/13	Building Automation Systems & Metrics Hydronic Systems	Fenimore JM Pleasants