

Energy Execs Sample Syllabus

Session 1 (3 days)	Introduction to NREL, National Energy Challenges, and Campus Tour
Session 2 (3 days)	Energy Systems Integration, Sustainable Building Design, and Analysis
Session 3 (3 days)	Economic Development and Communities of the 21st Century, Energy-Efficient Transportation and Biofuels
Session 4 (3 days)	Class Projects and Graduation

Session 1

Introduction to NREL: America's Energy Challenges and Opportunities

- Introductions and networking
- America's energy challenges and opportunities
- Advancements in solar and wind technologies and utility-scale renewable electricity applications
- NREL National Wind Technology Center tour
- Hosted evening reception

Session 2

Energy Systems Integration and Sustainable Building Design and Analysis

- Opportunities and barriers for utility-scale renewable energy generation, regional grid integration, and associated manufacturing opportunities
- Integration, the smart grid, and using NREL's sustainable campus building design as a living laboratory
- Analytical, economic, and resource tools to for making informed energy decisions supporting planning and financial decisions
- NREL Energy Systems Integration Facility tour
- Field trip

Session 3

Economic and Community Development

- The economic impacts of energy efficiency and renewable energy power: Models for reducing our power footprint
- Building design and construction, performance characteristics, analytical tools, and costs
- NREL Research Support Facility tour
- Field trip

Energy-Efficient Transportation and Fuels

- Transportation and fuels: Addressing the technological inefficiencies in our transportation system and the critical implications for our national security
- NREL Biofuels and Vehicle Testing Facilities tours

Session 4

Class Projects and Graduation

- Project presentations
- Graduation
- Alumni networking event