FREEDM SYSTEMS CENTER

Power Electronic Microgrids Short Course

January 23-25, 2019

COURSE BENEFITS

Understand the challenges and state-of-the-art solutuions when deploying and effectively managing microgrids.

The integration of distributed generation, load balancing and energy storage form the model of a microgrid. Applications include large scale data centers, electric ships and commercial/industrial buildings, bringing the benefits of high efficiency, power quality, flexibility, stability, and reliability. Power Electronics (PE) have become an important part of modern microgrids. Not only are many storage and distributed generation systems connected to the microgrid via PE converters, many of the modern loads use some sort of power conversion to ensure high-efficiency and high-performance operation.

This course is targeted towards professionals with a background in engineering, including project engineers, program managers, system integrators, and utility engineers.

Topics

- State-of-the-Art Microgrids
- Components & Energy Resources
- Protection & Coordination
- Primary & Secondary Controls
- Energy Management
- Cost-Benefit Analysis
- Field Implementation
- Future of Microgrids

Instructors

Mesut Baran, Ph.D. | NC State University
Ning Lu, Ph.D. | NC State University
David Lubkeman, Ph.D. | NC State University
Srdjan Lukic, Ph.D. | NC State University
Kevin Meagher | CEO Power Analytics Corp.
Aleksandar Vukojevic | Duke Energy
Len White, Ph.D. | NC State University

Course Fee

$900 FREEDM Member
$1200 Non-Member
Covers: Materials, break refreshments and lunches

Location

PowerAmerica Institute
North Carolina State University
930 Main Campus Drive, Suite 200
Raleigh, NC 27606

Registration deadline is December 20, 2018

Register at https://www.freedm.ncsu.edu/event/short-course-microgrids/