Online Courses

First Course on Power Electronics
10 individual online modules

University of Minnesota
Driven to Discover™
Details and Methodology

- Course management system (CMS) – WebVista (more commonly known as Blackboard)
- Multimedia (content and video)
- 1-hour video = 3-4 in class lectures (F2F)
- Online homework problems, self-assessments
Audience

- College and university faculty and instructors
- Practicing engineers
- Possibility for students at other schools per licensing agreement with University of Minnesota
Continuing Education

• CEUs are available to participants who pay registration fees ($75 per module)

• CEUs are applicable to PDHs for engineers
Objectives

• Faculty and instructors will review the course modules and integrate the information into their teaching methods.

• Faculty and instructors will utilize these online tools to assist their own teaching practices.
Future Courses and Work

- Electric Drives: An Integrative Approach
- First Course on Power Systems
- Improve First Course on Power Electronics by editing online tools and technology based on feedback
Wind Proposal

- Recent funding by Department of Energy
- 30 minute streaming video modules for each lecture
- Online concept quizzes with student response systems
- 20-30 case studies by industry experts
- Homework problems in Moodle (open source CMS)
- Video conferencing between new and resource faculty
- Learning Community in collaboration with 20 universities
Demonstration

- [www.ece.umn.edu/groups/power](http://www.ece.umn.edu/groups/power)
- [www.cce.umn.edu/power](http://www.cce.umn.edu/power)