

Online Courses

First Course on Power Electronics
10 individual online modules

UNIVERSITY OF MINNESOTA

Driven to DiscoverSM

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
- www.cce.umn.edu/power