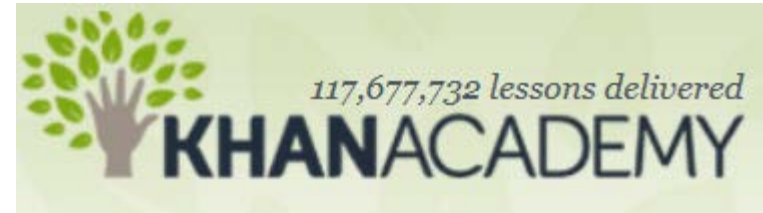


# Online Education is Big News!

**MITOPENCOURSEWARE**  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

## A Student-Centered Future for Higher Ed

Posted: 01/26/2012 5:55 pm



## M.I.T. Expands Its Free Online Courses

By TAMAR LEWIN

Published: December 19, 2011



## Stanford Professor Gives Up Teaching Position, Hopes to Reach 500,000 Students at Online Start-Up

January 23, 2012, 4:53 pm



# Consortium of Universities for Sustainable Power (CUSP)™

What is CUSP™?

CUSP™ Curriculum

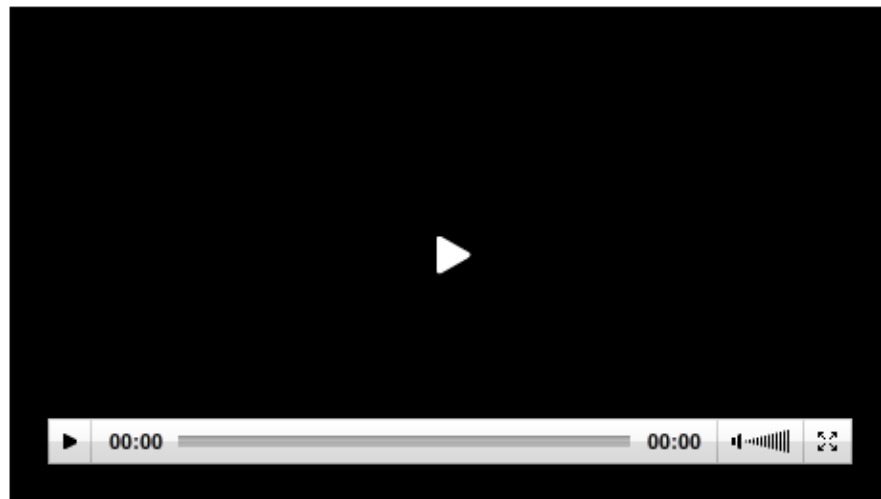
CUSP™ Members

Join

Forum

## Welcome

Welcome to CUSP™, the Consortium of Universities for Sustainable Power. This consortium will include universities that have come together to utilize, collectively evolve and promote the curriculum developed at the University of Minnesota – Twin Cities with the help of funding from various organizations including NSF, ONR (Office of Naval Research), NASA and EPRI.



## Join Now!!

Become a member and get access to all the resources. Joining is easy - fill an online request [here](#).

## Terms of Use

The material on this website is offered for educational purposes only. You may not use them for commercial purposes. The downloadable material in this website is licensed "as is, with all defects," without any express or implied guarantees or warranties. All implied warranties are disclaimed. You may distribute the copyrighted material for non-commercial purposes only on the condition that you properly attribute the work by the author(s); the same conditions apply when it is adapted (transformed, altered or built upon).

# So What is CUSP™?

What is CUSP™?

CUSP™ Curriculum

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Our vision is to create a community of teaching/learning scholars whose mission is to:

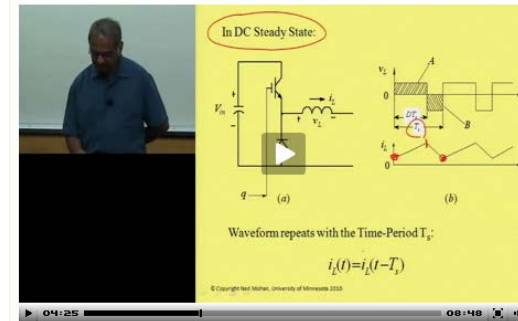
- provide a first-rate education in the field of Electric Energy Systems
  - with an emphasis on sustainability

# Additional Demands on our Time

- writing proposals
- guiding research of our graduate students
- student counseling
- Outreach
- attending conferences, and
- committee assignments!

# Each course consists of the following:

1. List of Course Learning Objectives
2. Textbook
3. Video clips for each lecture:
  - approximately 30 such video clips
  - average of 15-minutes long
    - a. Captions
    - b. PowerPoint Slides
    - c. Concept Quizzes
4. In-class discussion problems
5. Hardware Lab + Manual
6. Software Lab + Manual
7. Online Homework Problems using Moodle
8. A Discussion Forum



**You are free to use as much of it, or as little of it, and use it in a way that you want it – not necessarily how we use it.**

# CUSP™

## Members (as on now)

University of Minnesota  
- Twin cities  
University of Minnesota  
- Duluth  
University of North  
Florida  
California State  
University, Chico  
Penn State Erie, The  
Behrend College  
University of Louisville  
University of  
Connecticut  
Colorado State  
University of Northern  
Iowa  
University of the Pacific  
Northern Arizona  
University  
Boston University  
Penn State University -  
Harrisburg  
Bradley University  
Colorado State  
University  
Oregon State University  
South Dakota State  
University  
Wichita State  
Texas Christian  
University  
University of Texas at  
Austin  
University of Vermont  
West Virginia University  
West Virginia University  
University of Minnesota  
University of Texas at  
Arlington  
University of Toledo  
The University of  
Tennessee/Chattanooga  
Temple University  
University of Virginia  
Virginia Tech  
University of Maine  
Ohio Northern  
University  
Marquette University  
University of Arkansas  
University of California,  
Santa Cruz  
Northeastern University  
Seattle University

North Dakota State  
University  
Northeastern University  
Oakland University  
University of Texas at  
San Antonio  
New Jersey Institute of  
Technology  
Miami University  
Idaho State University  
Western Michigan  
University  
Youngstown State  
University  
Purdue University  
Calumet  
Christian Brothers  
University  
University of Bridgeport  
Gonzaga University  
Saint Louis University  
Ohio State University  
Baylor University  
University of Alaska  
Fairbanks  
University of Colorado  
at Colorado Springs  
The University of Iowa  
Western New England  
University  
Bucknell University  
San Diego State  
University  
University of New York -  
New Paltz  
Syracuse University  
University of Kansas  
University of Iowa  
University of Cincinnati  
Minnesota State  
University, Mankato  
Worcester Polytechnic  
Institute  
University of Utah  
Washington State  
University  
Suffolk University  
Gannon University  
University of Puerto  
Rico-Mayaguez  
Lake Superior State  
University  
Tuskegee University

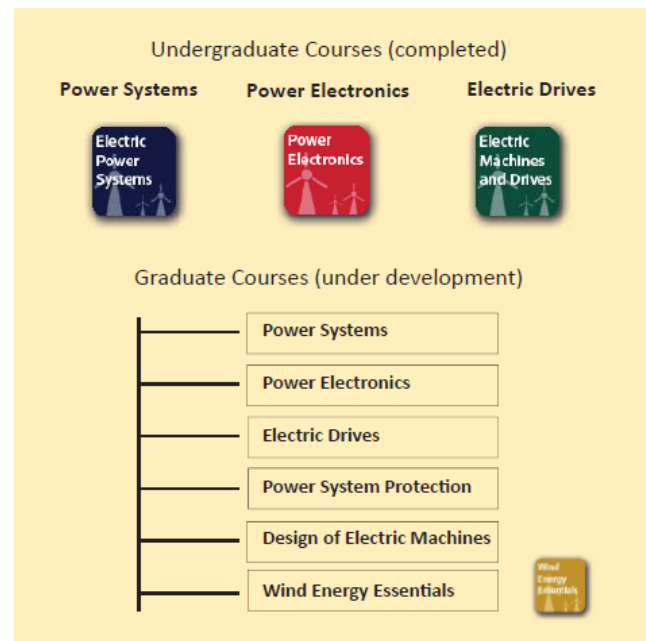
North Carolina State  
University  
Minnesota State  
University, Mankato  
California State  
University, Northridge  
Florida International  
University  
Washington University  
in St. Louis  
Texas A&M University  
University of Bridgeport  
Valparaiso University  
York College of  
Pennsylvania  
Howard University  
Cleveland State  
University  
University of Wisconsin  
River Falls  
Milwaukee School of  
Engineering  
University of Vermont  
University of New  
Haven  
Drexel University  
University of Florida  
San Diego State  
University  
Hampton University  
Binghamton University  
Montana State  
University  
Southern Polytechnic  
State University  
University of  
Connecticut  
University of Utah  
Penn State University  
Berks Campus  
Youngstown State  
University  
Texas A&M University

# Graduate Courses in Electric Power Curriculum

Sponsored by ONR:

**Center for Developing and Disseminating a  
Graduate/Undergraduate Curriculum in Electric Energy Systems  
to Universities and Practicing Engineers (2011-2014)**

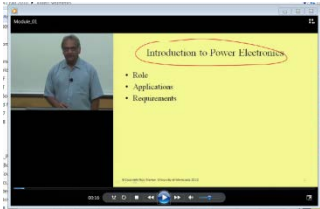
## Electric Power Curriculum



# Ideal for Blended Approach of Teaching To keep students actively engaged

## Procedure:

- **Pre-class**: watch a 15-minute module and answer a brief online concept quiz – 5% of the Grade
- **During-class**: discuss and solve real-world, design-oriented, somewhat open-ended problems in small groups; Clickers – 15% of the Grade
- **Post-class**: online homework problems on individual basis; based on Moodle - 15% of the Grade





# Faculty Development

# Joining is easy!

First Name(\*)

Middle Initial

Last Name(\*)

Department(\*)

University(\*)   
Only U.S. Universities

University Mailing Address(\*)

Teaching Position(\*)   
at the above University

Email(\*)   
this will be used for  
downloading material and  
access to Forum

**Sign-up**

- All the downloadable material is *free-of-cost*.

CUSP@UMN.EDU

# Distance Education For Practicing Engineers

- CEUs/PDHs
  - Certificates based on Proctored Exams
    - National College Testing Consortium  
(<http://www.ncta-testing.org/cctc/>)
    - National College Testing Consortium  
(<http://www.proctoru.com/>)

# Ideas for Creating a FORUM

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Forum

- Power of having a Forum
- Wikipedia
- Ratings at Amazon.com

# Global Education

