











CREDITS Center

-an epicenter for research and training in smart grids

The Interdisciplinary Center of Research Excellence in Design of Intelligent Technologies for Smart grids (iCREDITS) is a new research center that brings together a coalition of experts in electrical engineering, computer science, mathematics, management, and education.



ENERGY: Develop a formulation for energy delivery, and evaluate, validate and demonstrate the concepts through simulation studies and implementation. Contact: Satish Ranade (*sranade@ad.nmsu.edu*)

COMMUNICATION: Design a novel, scalable communication architecture that enables smart grid entities to effectively communicate with each other. Contact: Satyajayant Misra (*misra@cs.nmsu.edu*)

VISION: Obtain sustainable power generation by shifting power delivery to energy delivery using smart grid concepts.

OBJECTIVES:

- Create a *center* to enable interdisciplinary research and training in smart grids.
- Develop a *research* agenda to realize the energy delivery paradigm and sustain the design and development of smart grids.
- Develop a comprehensive *interdisciplinary*
 - education training pipeline in smart grids.

COORDINATION: Design coordination mechanisms that allow smart grid entities to coordinate their actions to ensure reliable and efficient energy delivery. Contact: William Yeoh (*wyeoh@cs.nmsu.edu*)

MONITORING: Develop techniques to detect and classify in real time disturbances occurring in transmission and distribution networks, so that system operators can appropriately respond to maintain system integrity. Contact: Sukumar Brahma (*sbrahma@nmsu.edu*)



- Promote participation of a *diverse student population* in smart grids research and training.
- Achieve sustainability and international
 Ieadership in smart grids research and training.

-working towards a smarter future

We are actively recruiting undergraduate and graduate students who are interested in working in this exciting area! Requirements: US Citizen or Permanent Resident.



iCREDITS Center, New Mexico State University 1290 Frenger Mall, SH 123, Las Cruces, NM 88003 More information: *http://icredits.nmsu.edu*

The iCREDITS Center is funded by the National Science Foundation under its CREST Program

