**CSU FULLERTON**

**CERTIFICATE PROGRAMS**

1. **Certificate in Green Data Center Management**

The Certificate in Green Data Center Management is designed to enhance the professional development of data center managers.   
  
The Certificate in Green Data Center Management consists of three required courses totaling 42 hours of lecture and discussion. The certificate graduate will receive 4.2 Continuing Education Units (CEUs), a nationally recognized unit used for professional development.

**Program Objective**

Upon completion of the certificate program, graduates will be able to:  
1. Understand the financial and business justifications for incorporating sustainability goals into data center planning and operation  
2. Identify and apply various measurement metric standards in evaluating data center efficiency  
3. Apply energy saving strategies in the design of data center facilities  
4. Apply energy saving strategies to the management of data center facilities  
5. Apply energy saving strategies to the purchase and maintenance of hardware equipment in data centers   
6. Apply energy saving strategies to the purchase and implementation of network and software infrastructure

**Who Should Attend**

The Advisory Board defined the certificate program audience as:  
1. Data Center Managers  
2. Systems Engineers  
3. Data Center Facilities Managers  
4. Enterprise-wide Systems Administrators  
5. Database Administrators  
6. Information Technology Architects

**COURSES:**

1. **Turning Green: Data Centers Energy Efficiency Notify me when class is available**

Understand the greater regulatory implications and industry trends that are leading the way toward sustainable practices, and to determine the business cost of failing to become more efficient. You will gain an understanding of the business case behind green data centers.

**b) Facilities Efficiency Notify me when class is available**

Examine sustainable strategies for electrical, cooling, ventilation, fire protection, and security systems. Class discussion will address tier level, right-sizing of the systems as well as the potential cost savings. In addition, learn energy auditing and preemptive maintenance concepts for data center facilities management.

1. **Energy-Saving Server Optimization Notify me when class is available**

Examine the theories behind this using case studies. The class will identify strategies that can be applied to various types of data centers, addressing issues relating to redundancy, virtualization, reliability, lifecycle management, network security, application consolidation and cloud computing.

**Courses treated as Full Time/Part Time in the field of Engineering.**

**MECHANICAL ENGINEERING**

<http://www.fullerton.edu/catalog/pdf/Depts_MechanicalEngineering-Music.pdf#MECHANICAL_ENGINEERING_COURSES>

**EGME 476A Dynamic Systems and Controls Lab**

**EGME 476B Energy and Power Lab**

**EGME 476A Dynamic Systems and Controls Lab**

**COMPUTER SCIENCE**

<http://www.fullerton.edu/catalog/pdf/Depts_ComparativeReligion-EducationalLeadership.pdf#COMPUTER_SCIENCE_COURSES>

**431 Database Systems**

**433 Data Security and Encryption Technique**

**477 Introduction to Grid Computing**

**531 Advanced Database Management**

**558 Advanced Computer Networking**

**ELECTRICAL ENGINEERING**

<http://www.fullerton.edu/catalog/pdf/Depts_ElectricalEngineering-EuroStudies.pdf#ELECTRICAL_ENGINEERING_COURSES>

**313L Power Laboratory**

**416 Feedback Control System**

**443 Electronic Communication System**

**519B Computer Networks and the Internet**