

# THE GRAINGER POWER ENGINEERING STUDENT AWARDS

## MISSOURI UNIVERSITY OF SCIENCE & TECHNOLOGY

The Department of Electrical and Computer Engineering Power Engineering Faculty of the Missouri University of Science & Technology is pleased to announce **The Grainger Power Engineering Student Awards** in the amount of **\$6000** for students who will complete their degrees in August 2015 through May 2016.

### Objective

The objective of the Grainger Awards is to reward high achieving undergraduate and graduate students who have exhibited excellence in power engineering through course selection, research projects, or senior design projects.

### Student Awards

Awards will be made in two primary categories: undergraduate and graduate student awards. While some of the requirements will differ between categories, the primary objective in both categories is the same: to motivate and reward excellence in power engineering. U. S. Citizenship is required in both categories.

### *Undergraduate Student Award Eligibility*

Undergraduate students who meet the following minimum requirements are eligible to be considered for the award:

- Must graduate in August 2015, December 2015, or May 2016.
- Must have earned a Bachelor of Science degree in Electrical Engineering.
- Must have completed a concentration of study in the electric power engineering field
- Must complete and submit an application by the appropriate deadline.

Table I: Undergraduate Power Engineering Emphasis Courses

| Course Number | Course Title             |
|---------------|--------------------------|
| EE 205/3500   | Electromechanics         |
| EE 207/3540   | Power System Analysis    |
| EE 302/5570   | High Voltage Engineering |
| EE 303/5560   | Distribution Systems     |
| EE 304/5550   | Power Quality            |
| EE 305/5500   | Electric Drive Systems   |
| EE 307/5540   | Advanced Power Systems   |
| EE 309/5510   | Electric Drive Vehicles  |
| EE 352/5150   | Photovoltaics            |
| EE 353/5520   | Power Electronics        |

A concentration of study in the power engineering field is defined as satisfying one the following:

1. Successful completion of three of the courses listed in Table I.
2. Successful completion of two of the courses listed in Table I and a senior design project with a power engineering faculty advisor.
3. Successful completion of two of the courses listed in Table I and an undergraduate research project with one of the power engineering faculty.

### *Master of Science Graduate Student Award Eligibility*

Graduate students who meet the following minimum requirements are eligible to be considered for the award:

- Must graduate in August 2015, December 2015, or May 2016.
- Must have earned a Master of Science degree and have a power engineering faculty member as thesis advisor.
- Must have completed a concentration of study in the power engineering field
- Must complete and submit an application by the appropriate deadline.

Table II: Graduate Power Engineering Emphasis Courses

| Course Number | Course Title                        |
|---------------|-------------------------------------|
| EE 302/5570   | High Voltage Engineering            |
| EE 304/5550   | Power Quality                       |
| EE 303/5560   | Distribution Systems                |
| EE 305/5500   | Electric Drive Systems              |
| EE 307/5540   | Advanced Power Systems              |
| EE 309/5510   | Electric Drive Vehicles             |
| EE 352/5150   | Photovoltaics                       |
| EE 353/5520   | Power Electronics                   |
| EE 402/6500   | Advanced Machines and Drives        |
| EE 403/6530   | Power System Reliability            |
| EE 404/6580   | Power System Operations             |
| EE 405/6560   | Power System Protection             |
| EE 406/6550   | Power System Stability              |
| EE 407/6570   | Surge Phenomena in Power Systems    |
| EE 408/6540   | Computer Methods in Power Systems   |
| EE 409/6510   | Electric and Hybrid Vehicles        |
| EE 453/6520   | Advanced Power Electronics          |
| EE 454/6525   | Power Converter Modeling and Design |

A concentration of study in the electric power engineering field for the M.S. Award is defined as satisfying the following:

1. Successful completion of three of the courses listed in Table II, of which at least one must be at the 400 or 6000 level.

### *Ph.D. Graduate Student Award Eligibility*

Graduate students who meet the following minimum requirements are eligible to be considered for the award:

- Must graduate in August 2015, December 2015, or May 2016.
- Must have earned a Ph.D. degree and have a power engineering faculty member as dissertation major advisor.
- Must have completed a concentration of study in the power engineering field
- Must complete and submit an application by the appropriate deadline.

A concentration of study in the electric power engineering field for the Ph.D. award is defined as satisfying the following:

1. Successful completion of four of the courses listed in Table II, of which at least two must be at the 400 or 6000 level.