Research Internship Information

**Name:** Canada-Shandong Electrical Engineering Project

**Chinese Host University and Department:** Shandong University - Electrical Engineering

**Eligibility Requirements:** Undergraduate and Postgraduate students with background of Electrical Engineering

**Research Internship Description:** (1) Computational Intelligence Application in power system control and operation (2) Power system analysis

**Research Internship Objectives:** Become familiar with recent research activities and technology developments in electrical engineering field in China in a friendly environment at Shandong University; become familiar with the application of computational intelligence in control and optimization of renewable integrated power system and learn to develop some of the intelligent-based algorithms to solve engineering problems; as well as frequency participation of wind turbines in grid frequency regulation; performing experiments and using the facilities at laboratories such as Key Laboratory of Power System Intelligent Dispatch and Control, Electric Power System Dynamic Models and Simulation Lab., Real Time Digital Simulation, Advanced Power System Digital Simulator, Advanced Power System Protective workroom, power system protection lab, high voltage labs., etc.

※Students are eligible to select “China Studies” courses during the internship period. “China Studies” is a comprehensive and interdisciplinary study area which combines sinology with contemporary China studies to form a new disciplinary. The courses are dedicated to educate those who aspire to become the professionals with broad knowledge and deep understanding of China.

**Student Roles and Responsibilities:** Developing some of the state-of-the-art intelligent-based algorithms coding to solve power system problems, experiments at the laboratories, and presenting talks in group meetings and deliver reports on the studied subjects.

**Hours per week:** Around 40 hours per week

**Grading:** Working time, lab performance, group talks, and team work and independent performance on assigned tasks.
**Number of Internship Positions:** 3-5 positions

**Research Internship Location:** School of Electrical Engineering at Qianfoshan Campus

**Research Internship Dates:** minimum three months in all year round

**Supervisor(s) Name(s) and Contact Information:** Prof. Lei Ding (dinglei@sdu.edu.cn); Assoc. Prof. Mostafa Kheshti (heshti@sdu.edu.cn)

**Administrative Contact Information:** Ms. Ma Mengran, mamengran@sdu.edu.cn

**Research Internship Code:** SDU-CLIC002

**Website address:** http://www.ee.sdu.edu.cn/

**Host university application:** no

**Research Internship Credit:** 6

**Dormitory accommodation available:** yes, on-campus International Student Dormitory is guaranteed.

**Additional fees:** (field trips, etc.) Aiming to maximize the students’ learning outcomes and deepen their understanding of Chinese society, besides the professional teaching and research activities, the field trips are included in the program to visit some of the famous tourist attractions of Jinan city and Shandong Province, the homeland of Confucius and other great philosophers of Chinese history. Hiking, visit to natural springs, ancient temples as well as potential visit to a technology center is included.