

# PROFESSIONAL MASTER'S IN SUSTAINABLE ELECTRICAL ENERGY

This master's degree is targeted to working engineers in the electrical energy and power industry. The Professional Master's in Sustainable Electrical Energy (PMSEE) program is structured to bring in students in specific cohorts. The degree features six required courses, including a culminating capstone project course, and four elective courses taken by all students in a given cohort and chosen from a selection of ten or more elective courses. Courses are organized in a sequential manner to cover in a comprehensive way the engineering content and industry emerging technologies in sustainable electrical energy. The required core for the PMSEE includes courses on power system operation and control, conventional generation, renewable energy sources, power systems economics, power system planning and reliability, and a capstone project course. Elective courses are chosen from subjects such as power system protection, power electronics, wind energy, smart grids, high voltage engineering, computational intelligence in power, solar energy, nuclear engineering and reactor engineering, fuel cell systems, and energy engineering economics and risk management.

Code	Title	Credit Hours
ECEP 6301	Power System Control and Operation	3
ECEP 8803	Special Topics (Conventional Generation) <sup>1</sup>	3
ECEP 8803	Special Topics (Renewable Energy Sources) <sup>1</sup>	3
ECEP 6304	Power Systems Economics	3
ECEP 6305	Power System Planning & Reliability	3
ECEP 6310	Capstone Project	3
Select four (4) electives from the following:		12
ECEP 6351	Power System Protection	
ECEP 8803	Special Topics (Advanced Power Electronics) <sup>1</sup>	
ECEP 8803	Special Topics (Smart Grids) <sup>1</sup>	
ECEP 8803	Special Topics (Computational Intelligence in Power) <sup>1</sup>	
ECEP 8803	Special Topics (Solar Energy) <sup>1</sup>	
ECEP 8803	Special Topics (Energy Engineering Economics and Risk Management) <sup>1</sup>	
ECEP 8803	Special Topics (Demand Response) <sup>1</sup>	
<b>Total Credit Hours</b>		<b>30</b>

<sup>1</sup> Special Topics course numbers may vary. Special Topics courses may be listed under ECEP 8803, ECEP 8813, ECEP 8823.