

Shahid Chamran University of Ahvaz Faculty of Engineering

Course Syllabus

General information:

Course Title: Electricity Market Credit Hours: 3 Credits/ 3 Hours a

Week

Instructor: Hossein Farzin, PhD Assistant Professor

Email Address: Farzin@scu.ac.ir, Farzin.hossein@gmail.com

Text Book:

- 1) D. S. Kirschen, and G. Strbac, *Fundamentals of Power System Economics*, John Wiley & Sons, 2019.
- 2) M. Shahidehpour, H. Yamin, & Z. Li, *Market Operations in Electric Power Systems*, John Wiley & Sons, 2002.

Additional References:

- 1) A. J. Conejo, M. Carrion, & J. M. Morales, *Decision Making Under Uncertainty in Electricity Markets*, Springer Science & Business Media, 2010.
- 2) D. R. Biggar & R. Hesamzadeh, *The Economics of Electricity Markets*, John Wiley & Sons, 2014.
- 3) J. M. Morales, A. J. Conejo, H. Madsen, P. Pinson & M. Zugno, *Integrating Renewables in Electricity Markets*, Springer Science & Business Media, 2014.

Course Contents

- Introduction to Power Electricity Markets
- Basic Concepts from Economics
- Short-Term Load Forecasting
- Electricity Price Forecasting
- Markets for Electrical Energy
- Participating in Markets for Electrical Energy
- Transmission Networks and Electricity Markets
- Power System Operation
- Investing in Generation
- Investing in Transmission
- Distribution Network Electricity Markets
- Risk in Electricity Markets

Grading Policy

-	Assignments	15%
-	Class Project	15%
-	Final Exam	70%