

Course Description

EE616: Special Topics in Electrical Power Systems: Integration of Alternative Energy Systems

Planning and Development of Integrated Energy, Advantages and Disadvantages, Economics and Sustainability, Wind Power, Solar Power, Combined Heat and Power, Hydropower, Geothermal Power, Other Resources, Interface with the Grid, Energy Storage Parameters, Energy Storage Technologies, Energy Storage as an Economic Resources, Principles of Power Injection, Converting Technologies, Integration of Multiple Renewable Energy Systems, Islanding and Interconnection Control, Interconnection Technologies, Standards and Codes for Interconnection, Interconnection Considerations, Distributed Generation, Grid-connected systems.