Introduction.- Renewable Energy Sources - Modeling and Forecasting.- Clearing the Day-Ahead Market with a High Penetration of Stochastic Production.- Balancing Markets.- Managing Uncertainty with Flexibility.- Impact of Stochastic Renewable Energy Generation on Market Quantities.- Trading Stochastic Production in Electricity Pools.- Virtual Power Plants.- Facilitating Renewable Integration by Demand Response.- Random Variables and Stochastic Processes.- Basics of Optimization.- Introduction to Stochastic Programming.- Introduction to Robust Optimization.- GAMS Codes.