

**Course Contents:**

Statistical methods in hydrology, probability distribution of hydrologic variables, hypothesis testing and goodness of fit, flood frequency analysis, single and multiple regression analysis, classification of time series, characteristics of hydrologic time series, statistical principles and techniques for hydrologic time series modeling, time series modeling of annual and periodic hydrologic time series (including AR, ARMA, ARIMA, and DARMA models), multivariate modeling of hydrologic time series, practical considerations in time series modeling applications.