

Module 10: Time Series Analysis and Forecasting

Glossary

ARMA

An acronym that stands for autoregressive integrated moving average; a forecasting model for a stationary time series

Cycle

Random, low-frequency variations in time series data

Decomposition

A technique to break time series data into trend, cycle, seasonality, and remainder

Differencing Time Series

A technique to convert a non-stationary time series into a stationary one

Non-Stationary Time Series

A series of data that shows seasonal effects, trends, and other structures related to the time index

Remainder

Any data that is not part of the trend, cycle, or seasonality in a time series dataset; also known as 'residue'

Seasonality

Predictable, periodic variations in time series data known to the modeler; also known as periodicity

Stationary Time Series

A series of data that has no trend or seasonal effects; stationarity is assumed or required for many statistical models

Trend

Long-term behavior of time series data