



HEC-HMS Hydrologic Modeling System Training Course

As recognized experts in the application of hydrologic and hydraulic computer models, WEST Consultants, Inc. routinely offers training courses on a national and international basis to government agencies and private industry organizations. These services include training courses on the use of the U.S. Army Corps of Engineers Hydrologic Engineering Center's (HEC) Hydrologic Modeling System (HEC-HMS). HEC-HMS is the latest precipitation-runoff simulation model developed by the U.S. Army Corps of Engineers and succeeds the widely used HEC-1 model.

The HEC-HMS training course shows participants how to construct watershed models in HMS and calibrate the model parameters through optimization methods. Students gain valuable hands-on experience in applying the model through numerous computer workshops. Hydrologic principles and their application to modeling in HMS are discussed throughout the course. Basin rainfall, precipitation loss rates, unit hydrograph transformation, and channel routing model components are explained. In addition, GIS preprocessing capabilities and applications are also presented. Training courses can be conducted in either English or Spanish languages.

Topics of the HEC-HMS training course include:

- Overview of Precipitation-Runoff Processes
- Introduction to HMS Capabilities and Features
- Basin Precipitation
- Rainfall Loss Rates Computation
- Transform Concepts
- Channel Routing
- Selecting the Appropriate Routing Technique
- Optimization in HMS
- Parameter Calibration
- Multiple Subbasin and River Reach Modeling
- Overview of GIS Applications

Experience:

WEST has assisted HEC with HEC-HMS training classes as well as providing training courses directly to many organizations including:

- CALTRANS
- Corps of Engineers, St. Paul District
- Corps of Engineers, Huntington District,
- Ventura County, California Public Works Agency

The content, duration, and cost of the HEC-HMS training courses are customized to meet the specific needs of the involved participants.

