

**TED University**  
**Department of Civil Engineering**  
**CE 410 Civil Engineering Design**  
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## **Risk Assessment in Hydraulic Design**

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### **Abstract**

Conventional design of hydraulic structures is based on deterministic approaches in which the design parameters are assigned without accounting for possible uncertainties. That is why the exact level of risk of systems cannot be quantified. In fact it is essential to evaluate the safety of hydraulic structures by using probabilistic methods, which consider the basic design parameters as randomly distributed, so that a probabilistic treatment can be carried out. This talk aims to provide information about possible sources of uncertainties involved in hydraulic design and the way of incorporating them into reliability-based calculations.

### **About the lecturer**

Dr. A. Melih Yanmaz is a full professor in Civil Engineering Department of Middle East Technical University. He has been teaching numerous courses in the fields of water resources engineering, river engineering, and bridge hydraulics at undergraduate and graduate levels. His fields of interest include water resources engineering with special emphasis to bridge hydraulics and river restoration, dam safety assessment and applied hydraulics.

