

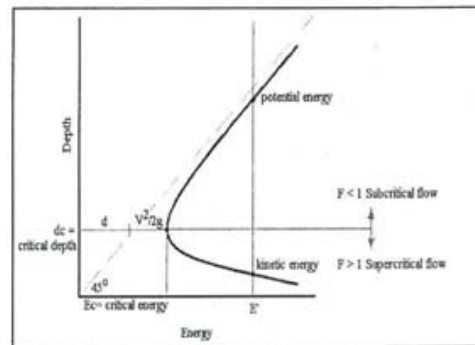
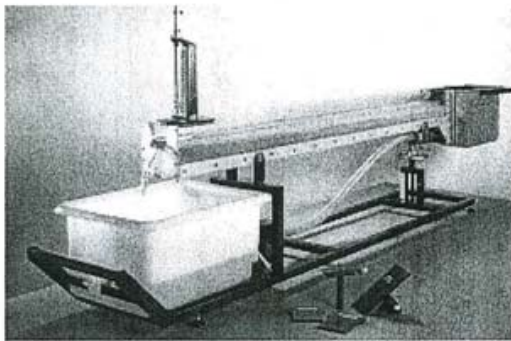
Hydraulics

Overview

This competition allows engineering students to display skills in problem solving and innovation with regards to open channel design.

Objective

Teams of three (3) will use a variety of “measurement devices” to analyze flow within an open channel flume. Student teams will be required to estimate a number of associated parameters.



Eligibility

Each school must enter one (1) team consisting of three (3) members. All participating members must be undergraduate students.

Logistics

Judges will be present to supervise the competition and collect answer sheets from participating teams. Teams will have 10-15 minutes to examine the apparatus and collect data. Teams will then be given up to 30 minutes to perform any calculations before submission.

Materials

Teams may bring an FE approved calculator and writing instruments only.
(<http://www.ncees.org/exams/calculators/#policy>)



All other materials will be provided during the competition. The FE reference manual (8th Edition Revised) will be the only reference.

Execution

- a. All questions regarding the completion rules may be directed towards the event coordinator.
- b. Schools will proceed with the competition one at a time in a predetermined order.
- c. Individual teams will have at most 15 minutes to examine the apparatus and collect data.
- d. Teams will then be given up to 15 minutes to perform any calculations before submission.

Judging

Teams will be judged on the accuracy of their provided answers. In the event of a numeric tie, total time to completion will be utilized to determine a winner.

Scoring

Points will be awarded as follows in the chart.

- Answer A = 20pts (+/- % error; 20 to 0 pts awarded)
- Answer B = 20pts (+/- % error)
- Answer C = 20pts (+/- % error)
- Answer D = 20pts (+/- % error)
- Answer E = 20pts (+/- % error)
- Time = Tie Breaker