## The University of Melbourne CVEN30008 Engineering Risk Analysis

## **Monte Carlo Simulation**

- 1. A simply supported timber beam of length 10 m is loaded with a central load P with  $\mu_S$ = 5 kN and  $\sigma_S$ = 2 kN. Using MATLAB, run Monte Carlo Simulation to generate:
  - 10 load values,
  - 100 load values,
  - 1,000 load values.

Compare their histograms to infer any differences in the simulations.