

SWANSEA INSTITUTE OF HIGHER EDUCATION

FACULTY OF APPLIED DESIGN & ENGINEERING
(BUILT ENVIRONMENT)

EXAMPLE

The arrow diagram in Fig. 9.15 represents the logical sequence of activities in a research and development programme for the design and construction of reinforced concrete nuclear pressure vessel. Because of the uncertain nature of the programme it is decided to analyse the arrow diagram using three estimates of duration for each activity. The three duration estimates (in weeks) are shown against each arrow in the figure. Thus, for arrow 1 - 2 the estimated optimistic, most likely and pessimistic durations are 6, 9, and 15 weeks respectively.

What is the probability that the programme will be completed in 33 weeks or less?

