

# Geometric Design Of Urban and Rural Roads Training

# Description

## **Course Description**

Good road design will achieve operational efficiency, be safe and cost effective, and minimise the environmental impact. The role of the road designer is to produce the most appropriate design that achieves the specified functionality using the design inputs from all relevant disciplines. The design must provide for a safe and efficient road facility that takes into account all inputs from stakeholders and road users.

This course will cover these principles so that delegates will obtain a clear understanding of the key geometric design requirements for road design. Delegates will be given the opportunity to apply the knowledge gained with various design exercises and syndicate participation of a re-design of an actual three kilometre rural roads

### **Course Objective**

Develop a basic understanding of the fundamentals in geometric road design Consider key engineering aspects that relate to a road design project Apply the knowledge gained through various design exercises to confirm understanding undertake a preliminary rural road design exercise on the drawing board in a design team environment

### **Course Outline**

- Road hierarchy and road classification in both urban and rural areas
- Design control and criteria
- Sight distances and their applications
- Horizontal alignment
- Vertical alignment
- Intersections (at-grade, grade separation, interchanges)
- Traffic control devices