AICTE – YOUTH UNDERTAKING VISIT FOR ACQUIRING KNOWLEDGE (YUVAK)
STUDY TOUR of ATAL TUNNEL

Introduction & Overview

Atal Tunnel has been built under the Rohtang Pass on the Leh-Manali Highway as an all-weather route to Leh and Lahaul and Spiti valleys. At a length of 9.02 km, it is the longest tunnel above 10,000 feet (3,048 m) in the world and is named after former Prime Minister of India, Atal Bihari Vajpayee. It was inaugurated by Prime Minister Narendra Modi on 3 October 2020. The tunnel reduces the overall distance between Manali & Leh from 116 km to 71 km and the travel time from 5 - 6 hours to about 2 hours.

The tunnel has been built using the New Austrian tunneling method and has been equipped with a semitransverse ventilation system, where large fans separately circulate air throughout the tunnel. A 2.25 m tall and 3.6 m wide emergency tunnel has been integrated into the tunnel cross-section beneath the main carriageway for evacuation during emergencies. Pollution sensors continuously monitor the air quality in the tunnel and if the air quality in the tunnel is below the desired level, fresh air is injected into the tunnel via two heavy duty fans on each side of the tunnel.Atal tunnel, an engineering marvel, is an important & interesting case study for of Civil, Mechanical & Structural Engineering Students.

Scheme

The Study Tour of ATAL TUNNEL scheme is intended for providing Financial Grant for conducting a Study Tour of ATAL TUNNEL by Students / faculty of AICTE approved Institutions in the field of technical education.

Objectives

1. To gain firsthand knowledge & information about the latest techniques used in construction of the tunnel and in **particular about the New Austrian tunneling method**.

2. Gain insight about the challenges & of risks encountered during the execution of this project and their resolution with particular reference to excavation during heavy snowfall in winter, blasting & digging of unstable rocks, alignment of the tunnel in view of digging & excavation from both ends of the tunnel, excavation & tunneling at more than 46 avalanche sites on approaches to the tunnel, disposal of huge quantities of excavated rock and soil, constant dewatering of heavy ingress of water, mudslides, landslides etc.

3. For enhancing the quality of engineering education in the country and to inculcate the research & innovation culture amongst the students.

4. To encourage engineering students to improve their field of technical education.

AICTE has sanctioned and granted Rs 1.70 lakh to the Department of Civil Engineering for the Study Tour of ATAL Tunnel under YUVAK scheme for 10 students + 1 faculty. The students under the Team Leadership of Prof. Quamrul Hassan has successfully completed the study tour during 23th June to 28th June 2022.


ATAL TUNNEL
ROHTANG


BORDER ROADS ORGANISATION
ATAL TUNNEL
MODEL ROOM


ATAL TUNNEL, RO