

# GUJARAT TECHNOLOGICAL UNIVERSITY

## B. E. SEMESTER: VIII

### MINING ENGINEERING

Subject Name: **MINE SAFETY ENGINEERING**

<b>Sr. No</b>	<b>Course Content</b>	<b>Total Hrs.</b>
1.	Development of industrial safety movement with special reference to mining; Accident costs, safety and productivity, safety standards, accident compensation and insurance.	4
2.	Accident cause concept of causes; unsafe conditions; unsafe acts, purpose and procedure of investigation. Accidents reports. Corrective action; personal protective equipment, emergency organization.	6
3.	Accident proneness; age experience; physical fitness; effect of environment. Accidents classifications Different bases.	4
4.	Accidents rates; frequency and severity rates; inter-industry and international comparisons, accidents record and statistics. Accident and incident analysis.	6
5.	Safety organization, role of Management, supervisors and workers; pit safety committee; workmen's inspection, Role of safety officers.	4
6.	Arousing and maintaining safety, interest, publicity and propaganda for safety, development of safe behavior, safety instruction, audiovisual aids, safety drives and campaigns; appraisal of safety program.	4
7.	Safety engineering : layout and safety; maintenance and safety; job safety analysis. Safety education and training.	4
8.	Vocational training as an aid of safety and productivity; techniques of training; lesson plan; training aids; training games, discussion method, motivation of workers.	4
9.	Mine vocational training scheme, staff and institution facilities; training records and reports; appraisal of trainees; assessment and evaluation of training schemes.	6

**Text Books/ Reference Books:**