

GUJARAT TECHNOLOGICAL UNIVERSITY
B. E. SEMESTER: VIII
MINING ENGINEERING

Subject Name: **MINING & PROCESSING OF DIMENSIONAL STONE**

Sr. No	Course Content	Total Hrs.
1.	Resources of Marble, Granite, Slate, Sandstone and Limestone as Dimensional stones in India vis-à-vis world, uses, marketing export. Allotment of lease and other legal aspects. Geological, Mineralogical and physio-mechanical properties of dimensional stones, criteria for selection of dimensional stone deposit.	12
2.	Mining : Convention mining of sandstone, Limestone, Marble and Granite. Wire saw, chain saw, hydraulic splitting flam jet cutting, water channeling etc. Blasting in dimensional stone mines. Development of mine, mine layout, Block yield.	10
3.	Processing : Dressing, Sawing, Gangs saw, circular saws, preparation and mounting of blade/discs and segments. Polishing Manual Mechanical, various types of polishing machine.	8
4.	Abrasive : Type, use and selection, shaping.	6
5.	Tile preparation, automatic tiling plant. Environmental impact of mining and processing of dimensional stones, secondary use of quarried land and waste of the industry.	6

Text Books/ Reference Books: