

PECI 5408 **CONSTRUCTION EQUIPMENTS, PLANNING & MANAGEMENT** (3-0-0)

Module – I

Construction equipments:

Different types of construction equipments, earth moving, dewatering and pumping, grouting, pile driving equipments.

Conveyers, cranes, Concrete mixture, Vibrators, Rollers, Compactors and other road construction equipments.

Factors affecting selection of construction equipments

Module – II

Equipments management, Productivity, Operational cost, Owning and hiring cost, Work motion study.

Objectives and functions of construction management. Finance and cost accounting, Quality control, safety and safety measures in construction works.

Network techniques, Introduction to CPM/ PERT methods and their use in construction planning. Construction schedules for jobs, materials, equipments, labour and finance.

Module – III

Contract Management:

Legal aspects, contract laws related to land acquisition, labour safety and welfare. Different types of contracts, their relative advantages and disadvantages. Elements of tender operation. Evaluation of tenders, Award of work, Disputes and arbitration.

Reference Books:

1. Construction Planning and management by U.K.Shrivastava, Galgotia publ.
2. Construction Planning and Management, Mehesh Verma
3. PERT & CPM, L.S. Sreenath, East West Press
4. Construction Project management, Theory and Practice, By Jha, Pearson.