MEE507 Engineering Management (2 Units)

- Organizational structure, formal and informal, definition of the term organization, development of organization from one-man business. Scientific organization.
- Why engineering management. Engineering to Engineering management. Assuming management responsibilities:-management knowledge requirement.
- The engineering manager job:- engineering management process, the management functions, engineering project manager, hierarchy structure and flow of information.
- Hierarchy (scalar principle), scalar chain, gang plan, unity of command business organization, logic of organizing, the classical organizer, the behavioural organization, bureaucratic organization, centralization and decentralization.
- Network analysis, CPN, PERT, forecasting, controlling, budgeting, nature decision making, employer attitude to managerial leadership.
- Production, stages in production, factory location and design, factory layout and site selection, production method, mass production, unit, small and large batches.
 Personnel management, safety consideration, training and apprenticeship and recruitment, trade unions and their functions, joint consultations, and collective bargaining, setting variable cost control, tendering and estimating, estimated costs for operational control, basic account, balance sheet development, marketing, market research-prediction by time series analysis, limitation of statistical analysis, questionnaires, advertising and sales promotions, export and import operations. Work study method.
- Research, characteristics of research design. What is a variable in research, operationalizing variables and types of variables? Financial management.