

MEE413 Technology Policy & Development (2 Units)

- Introduction - Technology and technological innovation; Specific issues and general; Innovation and competitive advantage; Types of innovation; the importance of incremental innovation; Innovation as a knowledge-based process; the challenge of discontinuous innovation.
- The Management of Research and Development - What is R&D; Basic and Applied Research; Centralized and Decentralized R&D; Managing Research Teams; Evaluation and Assessment of R&D.
- The Management of New Product Development - What is a new product?; The potential benefits of new product development; What makes a firm innovative in its new product development; Internal organizational integration for new product development; The importance of coordination in new product development; Human resource management factors in new product development; Project management techniques in new product development; Failure in new product development.
- The management of Operations and Production - What are operations and production and why are they important; Some techniques of operation and production management; Lean production; Investment appraisal techniques; Manufacturing strategy.
- Technology Strategy - Why technological innovation is a strategic management issue; Technology strategy; Technological competencies; Learning and Technology strategy