

IE 612 PRODUCTION PLANNING & CONTROL

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| Course Objective | The course enables the students to use various forecasting methods & their applications, different production planning models & capacity requirement planning. |
| Course Description | Study of different forecasting methods and their applications to various industrial and management problems, Analysis and design of production and scheduling control systems, machine sequencing, Flow shop, Job shop, Open shop, Algorithms for production planning and re-planning, Stochastic inventory models, Aggregate planning, Capacity requirements planning, Introduction to mixed production models. |
| Required Textbooks | <ul style="list-style-type: none">• Operations Management by Heizer and Render, 9th Edition, Prentice Hall• Elements of production planning and control by Samuel Eilon.• Principle of production control by J. L. Burbidge.• Manufacturing Planning & Control by Vollmann, William Berry & Whybark, McGraw-Hill.• Factory Physics by Hopp& Spearman, McGraw-Hill. |

Operations Management by Heizer and Render, 9th Edition, Prentice Hall

Elements of Production Planning and Control, Samuel Eilon, New York: Macmillan,

Manufacturing Planning and Control for Supply Chain Management, F. Robert Jacobs, William Berry, D. Clay Whybark, Thomas Vollmann,

The Principles of Production Control by J. L. Burbidge

Study of different forecasting methods and their applications to various industrial and management problems,

Analysis and design of production and scheduling control systems, machine sequencing,

Flow shop, Job shop, Open shop,

Algorithms for production planning and re-planning

Stochastic inventory models,

Aggregate planning

Capacity requirements planning,

Introduction to mixed production models