

# IE 304 : Production and Service Systems Planning I

The course teaches theory and concepts involved in model formulation for the analysis and control of production processes, including systems for planning and controlling production and service systems to achieve productivity and efficiency. The course addresses the basic issues in production planning, including aggregate production planning, master production schedule, materials requirement planning, and capacity planning. Flexible manufacturing systems, lean manufacturing, Just-in-time (JIT), and new concepts in manufacturing are addressed. Various production systems are described, including job shops, flow shop, cellular manufacturing covering scheduling and optimization.

**Credits** 3

**Lab Hours** 0

**Lecture Hours** 3

**Tutoring Hours** 0

**Prerequisites**

[STA 212](#)

**Corequisites**

IE 301