

**IE412 PRODUCTION PLANNING & CONTROL** Credit: 3(3-0) Major Course  
2<sup>nd</sup> Semester

**Lecture:** Dr. Busaba Phruksaphanrat (บุษบา พฤษภานรัตน์)  
Room 424 Tel. 02-564-3001~9 Ext. 3177  
Email: [lbusaba@engr.tu.ac.th](mailto:lbusaba@engr.tu.ac.th) URL: [www.engr.tu.ac.th/~lbusaba/](http://www.engr.tu.ac.th/~lbusaba/)

**Course Description:**

3(3-0-6) *Prerequisite* : IE 261, IE 364

Characteristics of production processes. Techniques of demand forecasting with an emphasis on statistical methods. Studies of controlling and managing major factors in production processes to lower production costs and idle time. PERT and CPM analysis.

Teaching Schedule

Week	Course Topics
1	Introduction
2,3	Forecasting
4,5	Aggregate Planning
6,7	Inventory: Independent Demand Systems
8	Midterm
9,10	Production, Capacity, and Material Planning
11,12	Operations Scheduling
13	Line balancing
14	JIT
14,15	CPM/PERT
16	Final Examination

**Text books**

Daniel Sipper, Rovert L. Bulfin, Jr., Production: Planning, Control, and Integration, 1997

**References**

1. William J. Stevenson, Production operations management, Sixth Edition, McGraw-Hill, 1999
2. Norman Gaither and Greg Frazier, Production Operations Management, Eighth Edition, 1999
3. James B. Dilworth, Production and operation management manufacturing and services, Fifth Edition, McGraw-Hill, 1993
4. Vollmann, Berry, Whybark and Jacobs, Manufacturing Planning and Control for Supply Chain Management, Firth Edition, McGraw-Hill, 2005
5. ชุมพล ศฤงคารศิริ, การวางแผนและควบคุมการผลิต พิมพ์ครั้งที่ 9, สำนักพิมพ์ ศ.ศ.ท., 2545
6. รศ.พิภพ สถิตาภรณ์, ระบบการวางแผนและควบคุมการผลิต พิมพ์ครั้งที่ 2, สำนักพิมพ์ ศ.ศ.ท., 2539

**Evaluation**

Homework/attendance/quiz or Assignment	20%
Midterm Examination	40%
Final Examination	40%