Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
IND438	Production Management	7	3	0	0	3	5

Prerequisites	
Admission Requirements	

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	The aim of this course is to present the concepts used in effective management of production systems and to learn how to develop solutions for problems related to the operations management.
Content	Week 1.: Presentation in chronological order techniques and nomenclature used in operations management. Week 2.: Supply chain strategy, supply chain performance measurement, bullwhip effect, outsourcing, mass customization. Week 3.: Strategic capacity management, capacity utilization, economies of scale, learning curve. Week 4.: Lean production, Toyota Production System. Week 5.: Demand management, qualitative forecasting methods, quantitative forecasting methods. Week 6.: Aggregate sales and operations planning Week 7.: Inventory control, inventory costs, inventory models Week 8.: Materials requirements planning, Push and Pull systems, Manufacturing Resource Planning. Week 9.: Midterm exam Week 10.: Process analysis, process flowcharting, process performance measurement. Week 11.: Manufacturing process selection and design. Week 12.: Service process selection and design. Week 13.: Quality management, Total Quality Management, Six Sigma Quality, Benchmarking, ISO standards, service quality measurement. Week 14.: Product design, product development process, quality function deployment.
References	• Kobu, B., Üretim Yönetimi, Beta Basım A.Ş., 13. Baskı, 2006. • Chase, R.B., Jacobs, F.R., Aquilano, N.J., Operations Management for Competitive Advantage, McGraw-Hill, 11. Baskı, 2006. • Cases related to the topics

Theory Topics

Week	Weekly Contents
1	Presentation in chronological order techniques and nomenclature used in operations management
2	Supply chain strategy, supply chain performance measurement, bullwhip effect, outsourcing, mass customization
3	Strategic capacity management, capacity utilization, economies of scale, learning curve
4	Lean production, Toyota Production System
5	Demand management, qualitative forecasting methods, quantitative forecasting methods
6	Aggregate sales and operations planning
7	Inventory control, inventory costs, inventory models
8	Materials requirements planning, Push and Pull systems, Manufacturing Resource Planning
9	Midterm exam
10	Process analysis, process flowcharting, process performance measurement
11	Manufacturing process selection and design
12	Service process selection and design
13	Quality management, Total Quality Management, Six Sigma Quality, Benchmarking, ISO standards, service quality measurement
14	Product design, product development process, quality function deployment