

Syrian Arab Republic Damascus University Faculty of Mechanical and Electrical Engineering Mechanical Engineering of Textile Industries and Their Technology Department

قسم هندسة ميكانيك الصناعات النسيجية وتقاناتها

Master Degree (Management of Textile Enterprises) in Mechanical Engineering

First Year			
	Weekly hours		
Subject	Th.	Pr.	Semester
Applied Statistics	3	1	1
Descriptive statistics and inference statistics: measures of central tendency (mean, median, mod, measures of dispersion). Sample and sampling distribution: sample types, sampling distribution, properties of sample distribution, calculation of sample size. Statistical inference for samples with large size: statistical estimation and its types, statistical tests (tests of hypothesis). Statistical inference for samples with small size: T distribution, its properties and uses, statistical tests for means. Chi-square tests. Variance analysis and fisher distribution: uses of F-distribution, analysis of variance (ANOVA), one-way ANOVA model and two-way ANOVA model. Regression and correlation coefficient significance test. Using SPSS program in statistical analysis data. Complementary topics.			
Advanced Control	3	1	1
Distributed Control Systems: Types of DCS, specifications of DCS, and components of DCS. Applications of distance temperature measurements. Simulation of work of air			

DCS. Applications of distance temperature measurements. Simulation of work of air compressors L-Series. PID control systems. Radar level sensor. Pressure measurement sensor. Thermocouples.

Textiles' Manufacturing Metho	ds
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Introduction, fabric structures, artificial intelligent and textiles manufacturing, digital systems in textile manufacturing, fabric structure analysis, manufacturing methods of fabrics, fabric faults analysis, digital-based technology for fabric structure analysis,

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CAD/CAM in textile industry.

Methods of manufacturing ordinary textiles. Methods of manufacturing denim fabrics DENIM. Methods of fabrication of bathrobe. Methods of manufacturing technical textiles: textile manufacturing methods used in transport, methods of manufacturing textile paper machines, methods of manufacturing geological textiles, methods of manufacturing protective textiles and safety, methods of manufacturing agricultural textiles, methods of manufacturing marine textiles, methods of manufacturing other technical textiles. Methods of manufacturing carpet textiles. Fabrication methods of the textile of the velvets. Narrow fabrication techniques. Management of operations in textile establishments.

Costs' Calculations of Textiles Production	3	1
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The cost, cost concept, cost types, applied examples in textiles, cost systems:(traditional cost systems, activity based costing system (ABC), activity based management system (ABM)). Standard cost, standard cost concept, applied examples in textiles. target cost, target cost concept, Target cost steps, create target cost. Cost reducing in textile factories, role of management in implementing cost reducing methods. Conventional cost systems. Other cost systems.

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1

Link scientific research with university objectives and national development plans. Transfer of modern technology and participation in its development. Creating an information base for ongoing and future researches. Organize the communication between research centers outside the university(domestic and foreign)and develop the cooperation between it. The development of a young researcher and encourage them to do more modern researchers. Encourage the dissemination of their researches in magazines or via local and international conferences.

Feasibility Study for Textile Projects	3	1	2

Processes in textile projects. Marketing study of textile projects: determine the justification



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for the establishment of the project, identify the required production in the market, marketing gap, apply the (S.W.O.T) analysis to identify the strengths, weaknesses and problems of the enterprise, application of modern marketing methods. Feasibility study of textile Projects: fixed capital account cost of land and construction, mechanisms and equipment for the textile factory, labor, supplementary production requirements), working capital account(raw materials, electricity consumption, annual wages of workers, fuels and oils, packaging expenses, advertising expenses, miscellaneous expenses). Redemption period. Calculate the break-even point. Feasibility study of a towel(Bashkir) Plant.

Introduction to textile products. Competitive advantage in textile industries, the definition, types, competitive forces analysis, competitiveness measurement. Strategic marketing planning, marketing policies, advertising. Green marketing in textile industries, the concept, benefits, Green marketing mix: (products, advertising, pricing, place), Green consumer. Marketing mix, the concept, textile product (pricing, distribution, promotion). Innovative/ creative marketing in textile industries, the concept, applicability, advantages and disadvantages. Direct marketing, the concept, advantages, methods, used methods, negotiation skills, negotiation strategies. Electronic marketing in textile industries, the concept advantages and disadvantages methods, types. Marketing information system for textile products.

Production Management	3	1	2
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Production management, production management concept, production management definition. Productivity, productivity types, productivity variables. Production planning, methods used in production planning. Production planning systems: (Just in time (JIT), linear programming system). Choose project position, examples in textile industries. Factory layout, factory layout according to production processes. Inventory management, methods of inventory classification. Modern management. The quality, Standard specifications.



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Scientific Research	2	2	2
Link scientific research with university objectives and national development plans.			
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Head of Mechanical Engineering of Textile Industries and Their Technology Department Prof. Dr. Eng. Taher Rajab Kaddar