

# MG: Production Management: Fashion and Related Industries

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## **MG 108 — Apparel and Home Textile Products Manufacturing**

2 credits; 1 lecture and 2 lab hours

For Production Management and Textile Development and Marketing students. Surveys manufacturing processes for apparel and home textile products beginning with product development to acquisition of fabrics through cutting, sewing, and finishing operations.

## **MG 114 — Principles of Product Construction**

3 credits; 2 lecture and 2 lab hours

This course will give the students a comprehensive working knowledge of product development and its transaction to in-production patterns and final patterns. They will learn how products can be made that meet all fit, quality, production and other customer requirements.

Prerequisite(s): TS 110 or TS 111 or or TS 131 or TS 115 and TS 015.

## **MG 132 — Marketing for Manufacturers**

3 credits; 3 lecture hours

Students are introduced to the basic concept of marketing and the components of the marketing mix in order to understand how fashion products are developed and successfully distributed. Computer-assisted marketing, including barcoding, e-commerce, and the role of the Internet, is investigated as a strategic tool for globalization.

## **MG 153 — Excel for Business**

2 credits; 1 lecture and 2 lab hours

This course prepares students to firm up their fundamental skill of Microsoft Excel 2019 for all business types and a very wide range of personal use. Excel program referring to MS 2019 textbook helps you to prepare and develop a professional level-competency in Excel 2019. Students will develop a fundamental computer filing and operation in a corporate setting. At the completion of the course students will be prepared to take the MOS-Microsoft Certification Application Specialist Exam (MCAS) for a Certificate in Excel.

## **MG 234 — Supply Chain Management**

3 credits; 3 lecture hours

This course gives students a thorough understanding of supply chain management from a manufacturer's perspective. Major areas of global sourcing, vendor evaluation, quality assurance, materials resource planning, inventory control, budget considerations, will be covered in this course. Students will develop a production plan for a season.

Prerequisite(s): MG 132.

## **MG 242 — Principles of Accounting**

3 credits; 3 lecture hours

This introductory course covers the accounting cycle leading to the creation of a business' financial statements. Topics include double-entry accounting, adjusting and closing entries, trial balances, inventories, bank reconciliation, specialized journals, accounts receivable, bad debts, and depreciation. Partnership and corporation accounting are also covered.

## **MG 252 — Product Data Management**

3 credits; 2 lecture and 2 lab hours

This course offers a hands-on approach to learning how to generate, transmit, and manage product data in a global business environment. Students construct product document packages for use in engineering, finance, logistics, manufacturing, and quality control.

Prerequisite(s): MG 153 and MG 253.

## **MG 253 — Object-Oriented Database Management**

2 credits; 1 lecture and 2 lab hours

Concepts of database management, including the development of object-oriented databases with Adobe Illustrator and Photoshop, are taught in this course. Integrating Microsoft Access with other programs within a microcomputer environment enables students to create data sets and reports, develop forms, and link databases.

Prerequisite(s): MG 153 or AC 161 or equivalent.

### **MG 299 — Independent Study in Production Management: Fashion and Related Industries**

1-3 credit

Prerequisite(s): a minimum 3.5 GPA and approval of instructor, chairperson, and dean for Business and Technology.

### **MG 301 — Fashion Value Chain Analysis**

2 credits; 2 lecture hours

This course is designed for baccalaureate-level students to study global apparel value chain, and mass-production techniques, examine the transition of apparel products from designer's samples to finished production merchandise and explore human resource management and labor relations in a global apparel firm.

### **MG 304 — Information Systems**

2 credits; 1 lecture and 2 lab hours

This course presents an overview of management information systems (MIS) and how they impact the productivity and processes of a business organization. Case studies and problems focus on the issues of finances, human resources, organization, and technology as they relate to information systems.

Prerequisite(s): MG 153 or AC 161 or equivalent.

### **MG 306 — Information Systems: Case Analysis**

2 credits; 1 lecture and 2 lab hours

This course presents an overview of Business Information Systems (BIS) and how technology must support all business initiatives. Students will problem solve different business situations with case studies, spreadsheets and database assignments. Areas to be covered include operations management, manufacturing, sales, marketing, finance, human resources and accounting.

Prerequisite(s): MG 153 or equivalent.

### **MG 311 — Manufacturing I: Equipment Analysis**

3 credits; 2 lecture and 2 lab hours

Students develop a familiarity with the various kinds of assembly equipment used to construct sewn products. Stitchology, specifications development, and sourcing are also covered.

### **MG 312 — Manufacturing II: Process Analysis**

3 credits; 2 lecture and 2 lab hours

This course presents the principles of workplace engineering in order to identify labor- and cost-saving methods. Students conduct time and motion studies, consider standardization procedures, and analyze garment assembly methods as factors in realizing efficiencies on the manufacturing floor.

Prerequisite(s): MG 114 and MG 311.

### **MG 313 — Cutting Room Processes**

3 credits; 2 lecture and 2 lab hours

The processes involved in the pre-production operations of sewn products--cut order planning, fabric utilization, marker making, fabric spreading, cutting, and costing--are studied. The fundamentals of laying out a cutting room and selecting equipment for specific applications are included. Students prepare markers by hand and computer.

Prerequisite(s): MG 114.

### **MG 314 — Manufacturing Process Analysis**

2 credits; 1 lecture and 2 lab hours

This course familiarizes students with the variety of equipment used to construct sewn products. Through hands-on use, students learn to select appropriate machinery and stitching types for various fabrications, garment categories, and end uses.

### **MG 411 — Manufacturing Facilities Management**

3 credits; 2 lecture and 2 lab hours

Students examine the criteria for designing and arranging the elements of a manufacturing facility with emphasis on modifying existing space, handling complementary products, and understanding workflow and the effect on quality and cost. They design and develop a detailed manufacturing facility layout.

Prerequisite(s): MG 312 and MG 313.

### **MG 432 — Strategy, Policy, and Decision Making**

3 credits; 3 lecture hours

This capstone course presents students with the opportunity to synthesize knowledge gained in previous semesters and prepare a complete business plan for a manufacturing company. They develop human resource policies, organization charts, and manufacturing, financial, marketing, and merchandising plans. Prerequisite(s): MG 411 and MG 442.

### **MG 442 — Product Costing**

3 credits; 3 lecture hours

Cost-accounting and industrial engineering concepts are applied to estimating, accumulating, and assigning costs to products that are mass-produced by apparel and apparel-related companies. Students learn cost-estimating techniques, practical methods to capture actual costs, and how to do variance analysis of actual and cost-estimated standards.

Prerequisite(s): MG 242, MG 312, and MG 313.

### **MG 499 — Independent Study in Production Management: Fashion and Related Industries**

1-3 credit

Prerequisite(s): a minimum 3.5 GPA and approval of instructor, chairperson, and dean for Business and Technology.