

## COURSE DETAILS

### 97103 General Studies in Packaging

(6 credits)

#### *Course Learning Outcomes*

1. To acquire knowledge and understanding on principles of packaging.
2. To acquire knowledge and understanding on type of packaging.
3. To acquire knowledge and understanding on process of packaging production.
4. To acquire knowledge and understanding on environment, law and regulations related to packaging.

#### *Course Description*

Principles of packaging; type of packaging based on paper, plastic, metal and glass; structure characteristics of packaging; packaging production process from packaging development in structure design, graphic design, printing, forming, liquid and dry packing, envelopment, delivered unit in distribution; impact of packaging on environment; laws and regulations related to packaging.

### 97214 Material and Sustainable Packaging Management

(6 credits)

#### *Course Learning Outcomes*

1. To acquire knowledge of printing and packaging materials.
2. To be able in using printing and packaging material as needs.
3. To acquire knowledge of the qualification of materials for printing and packaging.
4. To have ability to analyze the problem of printing and packaging materials.

#### *Course Description*

Knowledge about elements, category, standard, production processes, qualification of materials for printing and packaging such as mold, printing materials, inks, materials after printed job and other materials for printing and packaging, knowledge in select the kind of printing and packaging materials matching with the need of usage, problem analysis and solving approach in printing and packaging materials.

### 97218 Operation Managements and Entrepreneurships

(6 credits)

#### *Course Learning Outcomes*

1. To acquire knowledge of operation managements.
2. To acquire knowledge of entrepreneurships.

#### *Course Description*

The principles of operation management and entrepreneurships; Exploring key concepts such as managing people; Marketing analysis and product development; Plant location; Plant layout; Production planning; Production management; Human resource management; Sale and marketing management; Warehouse management; Cost management, Business opportunities; Sale forecasting; Business plan and business feasibility study; Product strategies; Promotion and marketing activities; Funding and financial management operations.

### 97219 Industrial Materials and Manufacturing Process

(6 credits)

#### *Course Learning Outcomes*

1. To acquire the basic principles of properties and industrial applications of material selections.
2. To acquire the principles of material fabrication processes.
3. To acquire the principles of engineering drawing.

**Course Description**

Engineering materials properties; Materials selection; Manufacturing methods: extrusion, forming, material machining, welding, heat processing, polishing, washing, coating and coloring; Principles of engineering drawing: drafting, parts, assembly; Tolerance for assembly.

**97316 Technology for Product and Process Design in Industry****(6 credits)****Course Learning Outcomes**

1. To understand CAD.
2. To understand the principle of grouping technology.
3. To understand the principle and use computer in production planning.
4. To understand the principle process of CAM.
1. To understand and using robot in the manufacturing.
2. To understand the principle of the material and parts automation conveyer.

**Course Description**

Production design technology, manufacturing process and technology in manufacturing automation, CAD and processes, grouping technology, CAM, robot and automation conveyer.

**97318 Printing and Packaging Design****(6 credits)****Course Learning Outcomes**

1. Knowledge and understanding in principle of design.
2. Knowledge and understanding printing and packaging design and development process.
3. Knowledge and understanding publication and packaging design.

**Course Description**

Principle of design, design in printing related with printing system, font design, graphic, color, design for general publication and packaging, packaging structure design, process of development and design in printing and packaging, related factors in printing and packaging design, development of packaging module, packaging design i.e. box, bottle, envelope, bag, can, tube, cab, tray, card holder, and product label, principle of food storage design, consumer goods package, medical and cosmetic packages, green package, packaging law and regulation included practical training.

**97419 Industrial Management Standards and Industrial Standards****(6 credits)****Course Learning Outcomes**

1. To acquire knowledge and understanding about quality control system.
2. To acquire knowledge of industrial management standards.
3. To acquire knowledge of industrial standards.
4. To be able to apply the knowledge of standard management and industrial standards into production.

**Course Description**

Ideas about quality system, sampling and control chart, modern quality management system which covers quality control management system where everyone participates, international standards in the industry, standard systems management products and services, environmental standards, product specifications and performance standards, system calibration process, standard laboratory and systems integration industry standards.

**97420 Logistics and Supply Chain Management for Industry****(6 credits)*****Course Learning Outcomes***

1. To acquire knowledge and understanding about Logistics.
2. To acquire knowledge and understanding about Supply chain.
3. Ability to apply logistics and supply chain management into the industrial management.

***Course Description***

The concept of logistics management, Material requirement planning, distribution, Center of gravity, cargo handling, cargo movement equipment and transportation models.

The concept of supply chain management, supply chain network, decision making in supply chain, inventory management, demand management and supply of raw material and prices, cooperative between organization in supply chain increasing efficiency, apply logistics and supply chain management in the industry.

**97431 Packaging Converting Technology****(6 credits)*****Course Learning Outcomes***

1. To acquire knowledge and understanding about packaging converting machine.
2. To acquire knowledge and understanding about packaging converting process.
3. To acquire knowledge and understanding about packaging converting technology.
4. To acquire knowledge and understanding about testing the usage of packaging competency.

***Course Description***

Type of packaging converting, packaging converting machine, paper packaging machinery, plastic packaging, metal packaging, glass containers, technology involved in packaging converting, competency test for packaging as well as practical training.

**Last updated: 18-July-2023**