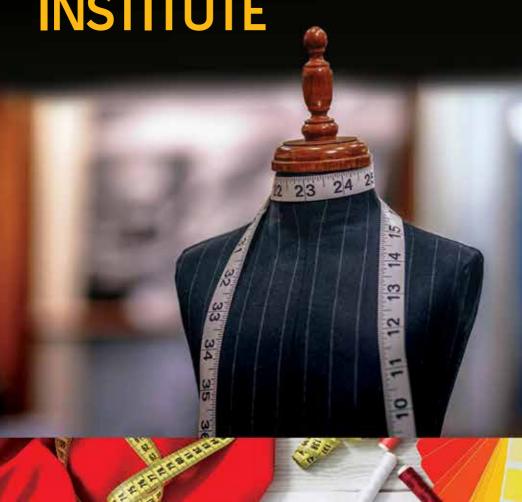
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# **Executive Diploma in Apparel Management & Technology**

# What is special about this Course?

This is the only Apparel specific Diploma which encompasses the fundamentals as well as the most modern concepts and techniques in the management of Garment Factories. It begins with an in-depth understanding of all functions in the making of apparels and progresses to teach latest developments in Industrial Engineering, Merchandising Management, Lean Manufacturing and Supply Chain functions. It is an absolutely useful course of studies for young people who have joined the industry in recent times as well as for those seeking employment in the Industry.

#### **Course Content**

#### 1. Introduction to Apparel Manufacturing

- · History of large scale Garment Manufacturing
- Evolution of Garment Industry in Sri Lanka after open
- Importance of Garment Industry for Sri Lankan Economy in past 4 decades
- Global Recognition of Sri Lanka Garment Industry

#### 2. Functions in a Garment Factory

- Production | Cutting
- Product Development & Merchandising
- Industrial Engineering, Sewing Floor Management
- Quality Assurance and Quality Control
- · Raw material and Finished goods warehouse

#### 3. Introduction to Management

- Management Functions
- Planning, Organizing, Leading, and Controlling function in relation to a Garment Factory
- Motivation Theories | Delegation
- Human Relations in a Garment Factory
- Managing People and Industrial Psychology

• Factory Layout | Roles and Tasks | Key Positions

#### 5. Product Development & Sample Stages

· Designing and sample concept

4. Overview of a Garment Factory

- Proto Sample and Fit Sample Stages
- Size Set Sample Stage | Salesmen Samples
- Pre- Production Sample Stage
- The Basic Principles of Pattern Production
- Construction of Basic Block draft on Shirt
- Development of Production Pattern Sets

### 6. Stores

- Raw material in-house process
- Stock Control & Stores Procedures
- Raw material QA approval process · Location management (Storing)
- Raw material allocation process
- · Raw material right off process
- Metal detection process in finished goods department
- Final AQL process | Finished goods loading

# 7. Cutting

- 'Cut order ' planning
- · Marker making and duplicating methods
- · Computerized marker planning (CAD & CAM)
- Optimum fabric utilization through marker making and fabric spreading
- Spreading methods (Manuel spreading and automated spreading)
- · Different types of cutting machines (New fabric cutting technology applicable to fabric cutting)
- Numbering and Bundling
- Material Utilization & Waste Reduction in cutting
- · Cutting Quality Assurance Practices

### 8. Fabric & Thread

- · Fibers and fiber properties
- Manufacture of varns and fabrics | Yarn numbering
- · Different types of fabrics (Woven fabrics and Knitted fabrics)
- Fabric Inspection Methods & Systems | Fabric defects

### 9. Managing the Sewing Floor

- Introduction to machines in a Garment Factory
- Production Process
- · Threads. Needles and Accessories
- Sewing Machine parts and their Functions
- · Use of Attachments (guides, gauges, foots and folders)
- Different Types of Seams
- Different kind of components and their construction techniques (collar, cuff, sleeve and welt pocket)
- Garment Breakdown (Analysis ) of a Shirt and Trouser

### 10. Production Management Techniques

- New style introduction and pre-production practices
- · Layout planning
- · Floor and flow layouts, Line / Band lay outs/ Dancing
- Component Assembly layouts, Modular Layouts,
- · Production systems
- Production Planning Functions, Making High Quality Garments, large variety / small quantity orders, large quantity orders
- Sub Contract management
- · Operation and process automations
- Process improvements

#### 12. Industrial Engineering

- Method Study | Overview of Industrial Engineering
- GSD and SMV Calculations
- Operation cycle time improvement techniques
- Yamazumi and Line Balancing
- Activity Sampling | Basic IE Calculations | Ergonomics
- Simultaneous Engineering
- · Value Engineering functions

#### 13. Quality Assurance and Management Systems

- Measurements and measuring procedures
- · How to measure different types of garments
- Quality specifications and standards
- · Process Quality control from spreading to packing
- Rules for Quality, Quality discipline
- Systems of Quality in Assurance
- Problems of Quality in practice | Defects Identification

# 14. Marketing and Merchandising Management

- Buving House co-ordination | Sourcing
- · Pre-costing and capacity planning
- · Order planning and progressing
- Order follow up (purchases), practices
- Import / Export procedures

### 15. Supply Chain Management . Basic Supply Chain Functions

- Logistics, Warehousing, Transportation, in Garment Industry
- Inventory Management , Supplier Management and Demand Forecasting in Garment industry
- Overview of global apparel value chain
- Globalization and privatization

# 16. Lean Manufacturing and Six Sigma

- Overview of lean manufacturing • Toyota Production System (TPS)
- Lean and lead time reduction in Garment Industry
- Lean and profit maximization in Garment Industry
- · Basic Lean tools application to garment factory
- 5S and Visual management
- · Process Mapping and value stream mapping
- · Kaizen and process improvement
- Systematic Problem-solving techniques
- · Quick change over (QCO)
- · Kanban, STW and Yamazumi
- · Six sigma applications to garment manufacturing

# 17. Enterprise Resource Planning in Apparel Manufacturing

· Importance of ERP and other demand and supply management systems

# 18. Human Recourse Management

- Role of HR in a Garment Factory
- Absenteeism & Labor Turnover Management
- Training | Skills Development | Incentive Schemes
- Supervisory Skills | Performance Management KPIs

# • Basic Labor Law | Health & Safety 19. Garment Industry Related Project and the Logbook