

INDUSTRIAL &

MANAGEMENT ENGINEERING

COURSES

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Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other:10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Condition based maintenance.
- Procedures of condition monitoring.
- Bases for the detection of faults in rotating and reciprocating machinery.
- Hands –on practical experience in Machinery fault Diagnostics.

Course Objectives:

The course will cover different traditional and advanced maintenance strategies with special focus on condition-based types of maintenance techniques. Many case studies are used to exhibit the potential, feasibility and characteristics

Learning outcomes:

- Knowledge and understanding of how vibrations are related to machine status.
- Intellectual skills of vibration measurements and analysis.
- Professional and practical skills of fault diagnosis, machinery monitoring, and maintenance scheduling.
- General condition monitoring techniques.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Engineers of different Backgrounds, Maintenance Managers, Inspection Engineers.



Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Introduction to facility planning and MH
- Sources of information
- Process Design
- Type of layouts
- Flow analysis
- Work station design – space requirements
- Auxiliary Services – Space requirements
- Selecting location
- Employee services – Space requirements
- Office layout
- Area Allocation
- Master Facility Layout

Course Objectives:

This course develops an understanding of the principles of facilities location, layout, and material handling systems and the practice of designing industrial facilities.

It will emphasize modeling, design, and analysis techniques. It will try to provide a balance of exposure to available methodologies in selecting facilities location, layout, and material handling, warehouses, with a practical interests on issues that are difficult to capture in quantitative models but are important to consider.

Learning outcomes:

- Knowledge and understanding of the different stages of facilities planning.
- Practical and intellectual skills of facilities design.
- Modeling, analysis and design techniques relevant to the facilities planning process.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

Who should attend:

Industrial Facility planner, Industrial, production, operational and mechanical engineers involved in facility and warehouse management. design and processes.

Course References:

Eric Teicholz , "Facility Design and Management Handbook", McGraw-Hill
Fred E. Meyers, and Mathew P. Stephens, "Manufacturing Facilities Design and materials Handling", Pearson-Prentice-Hall.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
- Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
- Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

- Registration:** AAST Admission Registration Online Other: -----
- Sponsor:** Individual Funded By: 5000 L.E. Egyptian Company
- Fee's:** L.E. 800 \$ 200 Other: 2000 \$ Non Egyptian Company
- Documents required:** Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Analysis of work and job elements
- Productivity and Cost Analysis
- Production Line balancing
- Procedures to analyze work elements
- Work measurements
- Working environment
- Flow and motion studies
- Time studies

Course Objectives:

This course provides detailed analyses and procedures to enhance effectiveness, efficiency, and production rates. Detailed investigations of work elements, time, motion and jobs in production lines, manufacturing and industrial systems will be discussed.

Learning outcomes:

- Gaining knowledge and understanding of:
- The importance of increasing productivity and improving product reliability & quality.
 - Lowering unit cost, through minimizing the time required to perform a task and conservation of resources and power consumption.
 - Maximizing safety, health and well being of employees.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Production engineers – manufacturing engineering – operational and process development engineers and specialists – Middle managers of different backgrounds and specialization.

Course References:

R.M. Barnes, "Motion and Time Study, Design and Measurement of Work", John Wiley and sons.
Benjamin Niebel and Andris Freivalds, "Methods, Standards, & Work Design", McGraw-Hill.
J.Dut and B.A. weerdmeester, "Ergonomics for beginners, a quick reference guide", Taylor & Francis.
Institute of industrial engineers, "Case Studies", Industrial Ergonomics and Management press.
Wickens, Lee, Liu, and Gordon-Becker, "Introduction to Human Factors Engineering ", Prentice Hall.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International

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Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Introduction to Project management
- Project Screening and Selection
- Organizational structure and Work Breakdown Structure
- Project Scheduling
- Network Models
- Bar Charts
- PERT and CPM
- Project Crashing
- Project Budget
- Resource Management.
- MS Project® and case studies

Course Objectives:

To introduce the basic nature of scheduling all kinds of projects, Engineering, Business, Public and Information System and covering various techniques required to carry out this procedure.

Learning outcomes:

- Knowledge and understanding of
- The importance of work breakdown structure in project management.
 - PERT/CPM techniques and their application in solving problems by network diagrams.
 - The probabilistic approach in analyzing network diagrams.
 - Resource allocation and resource levelling on a given project.
 - Scheduling a realistic project using a suitable computer software package.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:



Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- International Operations : an Overview
- The Cultural Environment Facing Business
- The Political and legal Environment Facing business
- The Economic Environment
- International Trade Theories
- Governmental Influence On Trade
- Regional Economic Integration and Cooperative Agreement
- Factor mobility and Foreign Direct Investment
- Global Manufacturing and Supply Chain Management

Course Objectives:

This Course offers essential background information for engineers, managers and other professional working in a global and international arena. It provides issues, directions, and models that shape the management style of multi-national firms. Many technological, economic, and financial problems are tackled with a free learning and interactive environment.

Learning outcomes:

- Knowledge and understanding of
- The nature of the ever-growing field of international operations.
 - The evolution of firm strategy as part of the internationalization process, plus the countervailing forces that firms are likely to encounter during that process.
 - The elements of the external international operations environment.
 - Attendees will be better able to interact with the business world in the environment of globalization.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

Who should attend:

Managers of operations, middle and top-management Engineers, and professionals of any background and from any discipline.

Course References:

John D. Daniels Lee H. Radebaugh, "International Business Environments & Operations", Addison Wesley.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
- Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
- Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

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Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Types of warehouses
- Functions and requirements
- ABC Inventory analysis
- Steps and Procedures for designing a warehouse
- Unit loads and SKU's
- Order Picking
- Receiving Areas
- Shipping Areas
- Material handling
- Designing Shelves
- Coding systems
- Flow analysis
- Improving Efficiency and area allocations

Course Objectives:

This course provides a thorough analysis of the problems of warehouse planning, operation and management in industrial and service firms.

Learning outcomes:

Knowledge and understanding of how to:

- Organize warehouse space, equipment, and personnel for maximum efficiency and customer satisfaction
- Develop a Warehouse Information System Plan to manage and control receiving, storage, picking, and shipping operations as well as losses.
- Select the best combination of materials-handling and storage equipment
- Fill orders faster—and more cost-effectively.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Industrial Facility planner, Industrial, production, operational and mechanical engineers involved in facility and warehouse management. design and processes.

Course References:

Fred E. Meyers, and Mathew P. Stephens, "Manufacturing Facilities Design and materials Handling", Pearson-Prentice-Hall.

Eric Teicholz , "Facility Design and Management Handbook", McGraw-Hill

Edward H. Frazelle, "World-Class Warehousing and Material Handling", McGraw-Hill

Fred E. Meyers and Matthew P. Stephens, "Manufacturing Facilities Design and Material Handling", Prentice Hall.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

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- Average English

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Course Facilities

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Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
- Delegates Participation

Certificate Issue: Local Premises AASTMT International

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Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Principles of materials handling
- Material handling equations
- General classification of material handling equipment
- Types of conveyors
- Conveyor analysis
- Types of cranes
- Industrial Vehicles and accessories
- Selecting of appropriate material handling equipment

Course Objectives:

This course presents a detailed background for different types and uses of material handling equipment, tooling and accessories which are extensively used in any industrial facility. Issues related to operational characteristics, selection, and design will be discussed.

Learning outcomes:

- Upon completion of this course attendees will be able to:
- Identify the different classifications and the basic concepts of material handling systems.
 - Identify the different variations of these systems within each category.
 - Analyse the performance of each of these types.
 - Select the most appropriate material handling system for a given situation.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

Who should attend:

Industrial, production, operational, electrical and mechanical engineers involved in materials handling in facilities and warehouses management.

Course References:

Edward H. Frazelle, "World-Class Warehousing and Material Handling", McGraw-Hill
Fred E. Meyers and Matthew P. Stephens, "Manufacturing Facilities Design and Material Handling", Prentice Hall.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

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Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
- Delegates Participation

Certificate Issue: Local Premises AASTMT International

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Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Lean operations system
- Goals of JIT and explain its importance
- Building blocks of JIT
- Benefits of JIT systems
- Considerations important in converting a traditional mode of operations to a JIT systems
- Obstacles that might be encountered when converting to a JIT system
- Product and process design
- Small lot sizes and setup reductions
- Cellular manufacturing
- Modularity and Inventory strategies
- Poka-Yoke and Kaizen
- Push and Pull Systems
- Case Studies

Course Objectives:

This course presents concepts of lean production and JIT strategies. It provides the basic building blocks of such an innovation and how efficiency and cost structure could be improved with the adoptions of its procedures

Learning outcomes:

- Participants will be able to :
- Define the concepts of lean production systems.
 - Develop a management structure for achieving the highest quality, lowest possible cost, and delivered on time products to customers.
 - Deploy management strategies to achieve the five primary operations objectives.
 - Develop subordinate management skills and roles for achieving the five primary operations objectives.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

Who should attend:

Managers, specialists and engineers of different backgrounds working in industrial, operational, and production facilities.

Course References:

Ronald G. Askin and Jeffrey B. Goldberg, "Design and Analysis of Lean Production Systems", Wiley and Sons.
William J Stevenson, "Operations Management with Student DVD and Power Web", McGraw-Hill.
Hill, T., "Production/ Operations Management", Allyn and Bacon, Inc.
Starr, M.R., "Managing Production and Operations", Prentice Hall.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
- Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
- Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

Registration: AAST Admission Registration Online Other: -----

Sponsor: Individual Funded By: 5000 L.E. Egyptian Company

Fee's: L.E. 800 For Egyptian \$ 200 For non Egyptian Other: 2000 \$ Non Egyptian Company

Documents required: Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name: **Risk Assessment**

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Introduction, overview, key definitions, and legislation
- Hazard identification and analysis
- Hazard operability (HAZOP)
- Workplace inspection worksheet
- Accident theories
- The systematic approach to conducting Risk Assessment (RA)
- Prioritization of Risks
- Risk assessment matrix (Decision-making matrix)
- Risk Assessment "Scenarios": practical session
- Fire Risk Assessment (FRA)
- Environmental Impact Assessment (EIA)
- Practical sessions, case studies, software & and Risk-related movies

Course Objectives:

The course teaches the basic skills, through case studies and group exercises, of Hazard Identification and Risk Assessment procedures.

Learning outcomes:

- Upon completion of the course, participants will:
- Be able to realize why Risk Assessments are important
 - Be able to recognize how Risk Assessment can be a means to better management of safety
 - Realize factors, conditions, and situations associated with identified Hazards and Risks
 - Recognize the importance of Risk Assessment in pinpointing key risks and in devising control means.
 - Know the systematic approach to conducting Risk Assessment
 - Get a chance to practice using a Risk Assessment Software Toolkit

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

Who should attend:

- Production/Engineering/Maintenance Managers
- Process/Instrumentation/Design Engineers
- Safety Engineers, Safety Committee Members
- Project Managers and Supervisors

Course References:

David Vose, "A Quantitative Guide, Third Edition", Wiley.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

- Registration:** AAST Admission Registration Online Other: -----
Sponsor: Individual Funded By: 5000 L.E. Egyptian Company
Fee's: L.E. 800 \$ 200 Other: 2000 \$
 For Egyptian For non Egyptian Non Egyptian Company
Documents required: Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Safety Business: Introduction
- Elements of an Effective Safety & Health Program
- Environmental Health Risk Assessment
- Environmental Waste Management (ISO 14001)
- Hazardous Materials
- Workplace Hazard
- Hazard Communication
- OSHA Ergonomics
- Hearing Conservation Program
- Fire Safety
- Flammable & Combustible Liquids
- Compressed Gas Cylinders
- Confined Space Entry
- Electrical Safety

Course Objectives:

This short course will help participants decide that safety is everybody's business, and why. The course will provide an understanding of accident causes, hazard risks and safety conditions. It will also encourage employers and employees to reduce workplace hazards and to implement new or improve existing safety and health programs.

Learning outcomes:

Safety responsibilities for both employees and employers will be explained. Participants will be introduced to specific topics such as fire safety, lab safety, office safety, Indoor air quality.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Security and Safety Staff Department - Staff of Environmental Department - employees of Petroleum and Industrial organizations.

Course References:C. Ray Asfahl, 'Industrial Safety and Health Management', Prentice Hall.
Roger L. Brauer, "Safety and Health for Engineers", Wiley.**No. of Participants/course:** 5-10 10-15 15-20 Other: -----**Qualifications of Participants:**

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3**No. of Assistance:** 1 2 3**Course Facilities**

- | | | | | | |
|---|--|---|---------------------------------------|--|--|
| <input checked="" type="checkbox"/> White Board | <input checked="" type="checkbox"/> V. Projector | <input checked="" type="checkbox"/> Data show | <input type="checkbox"/> PC | <input checked="" type="checkbox"/> Manual | <input checked="" type="checkbox"/> Handouts |
| <input type="checkbox"/> Books | <input checked="" type="checkbox"/> Flip charts | <input type="checkbox"/> S/W | <input type="checkbox"/> Other: ----- | | |

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International**Course Registration**

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Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Introduction and Definitions
- Flammable Gases and liquids
- Purpose of Electrical Classification
- Sites with an explosion hazard
- Hazardous Location Types (Classification)
- Class I Locations
- Class II Locations
- Class III Locations
- Hazardous Location Conditions
- Division 1
- Division 2
- Nature of Hazardous Substances
- Class I (Gas) Groups
- Class II (Combustible Dust) Groups
- Requirements for the Equipment Used in Hazardous Locations
- Auto ignition temperature for gas mixture
- Explosion proofs Electrical Equipment
- API, IP codes and European Directive 94/9/CE
- The selection of electrical equipment and installation rules
- Workshop and conclusion

Course Objectives:

To introduce the participants to the various types of hazards and how to classify them according to the different hazard codes and directives.

Learning outcomes:

By the end of this course the attendees will be familiar with the classification of hazardous areas, and how a safe electrical installation is done in a hazardous zone. Also, they will be familiar with the manufacturing standards and methods of protection, which will be covered using case studies

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Safety Specialists, Maintenance, Project, and Process Engineers/ Technicians

Course References:

C. Ray Asfahl, 'Industrial Safety and Health Management', Prentice Hall.
Roger L. Brauer, "Safety and Health for Engineers", Wiley.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

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Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Organize the collection of plant data and undertake an analysis of it which will facilitate the diagnosis of reliability problems and their effective elimination.
- Select and apply the most appropriate of the currently available techniques for reliability assessment.
- Assess, and take effective steps to improve, the overall availability of operating equipment and plant.
- Design and modify plant for improved maintainability.
- Fully understand the various reliability concepts underlying the application of reliability-based approaches to the formulation of maintenance strategy and effective process evaluation.

Course Objectives:

To be able to measure and available reliability and hence control it .
To be able to decide proper warranty and maintenance policies.

Learning outcomes:

After finishing this course, attendees will have a working knowledge of the techniques of reliability engineering and the ability to apply them to improving the maintenance, the maintainability, hazard risk and the safety of the plant- existing and proposed - in the workplace.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Safety Engineers, Process Monitoring Engineers, Maintenance Engineers, Project Managers in all field of Engineering, Design Engineers and Testing Engineers.

Course References:

John P. Bentley, "Introduction to Reliability and Quality Engineering", Addison Wisley.
El-Sayed A. El-Sayed, "Reliability Engineering", Addison Wisley.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

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- Fee's:** L.E. 800 For Egyptian \$ 200 For non Egyptian Other: 2000 \$ Non Egyptian Company
- Documents required:** Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name: Machinery Vibration Monitoring and Analysis

Institute/Centre: College of Engineering and Technology **Department:** Industrial & Mgt. Eng.

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue: AASTMT- Abu Keer

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- A detailed understanding of measurement and characteristics of vibration signals.
- Ways in which vibration data can be stored and represented.
- Vibration-based faults detection.
- Vibration-based diagnostic techniques.
- How to assess, accurately, machinery conditions.
- Detailed and reliable diagnoses for a range of common machinery and component types
- Practical implementation techniques.

Course Objectives:

This course will give a detailed treatment of the detection, location and diagnosis of faults in structures, vehicles, rotating and reciprocating machinery, using vibration analysis, with hands – on Practice.

Learning outcomes:

- Knowledge and understanding of how vibrations are related to machine status.
- Intellectual skills of vibration measurements and analysis.
- Professional and practical skills of fault diagnosis, machinery monitoring, and maintenance scheduling.
- General condition monitoring techniques.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Engineers of all qualifications and background including: Civil, Mechanical, Electrical, Chemical, Computer Technology.

Course References:

J. S. Mitchell, "Machine condition monitoring using vibration analysis", McGraw Hill
R. Wook, "Vibration Analysis", Prentice-Hall

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International

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Sponsor: Individual Funded By: 5000 L.E. Egyptian Company
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Documents required: Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Introduction and definition of the modes of mechanical failure.
- Overview of Fracture Mechanics.
- Fatigue failure and fatigue life prediction.
- Creep and stress rupture for high temperature operating conditions.
- Wear types.
- Corrosion.
- Case studies
- General practice procedure in Failure Analysis.

Course Objectives:

The objective of the course is to develop the participant's abilities in recognizing the various forms of failure and to carry out failure investigations to avoid such failures in the future.

Learning outcomes:

This course will increase the awareness of practicing engineers to the various modes of mechanical failure of different machine components.
The course will develop their ability to reduce or eliminate the possible causes of these modes of failure.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Industrial – Production – Mechanical - Chemical Engineers working on the design, erection, operation, and maintenance of machines and equipment.

Course References:

Wulpi, D.J., "Understanding How Components Fail", American Society for Metals.
Hutching, F.R and Unterweiser, P.M., "Failure Analysis: The British Engine Technical Reports", American Society for Metals.
Barer, R.D. and Peters, B.F., "Why Metals Fail", Science Pub.
ASM, "Metals Hand Book", American Society for Metals.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

Registration: AAST Admission Registration Online Other: -----
Sponsor: Individual Funded By: 5000 L.E. Egyptian Company
Fee's: L.E. 800 \$ 200 Other: 2000 \$ Non Egyptian Company
For Egyptian For non Egyptian
Documents required: Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Fundamentals of Heat Treatment
- Equilibrium Diagrams & The Iron-Carbon Phase Diagram.
- Isothermal Transformation.
- Heat Treatment Processes:
- Annealing processes.
- Normalizing.
- Hardening of Steels.
- Tempering
- Case Hardening (Carburizing, Cyaniding, Nitriding, Flame Hardening, Induction Hardening).
- Precipitation Hardening of Nonferrous Alloys.
- Heat Treatment Tools and Equipment
- Applications.

Course Objectives:

- To control the structure and properties of Metallic Materials, specially Steels to cope with manufacturing or service requirements.
- To help reducing or eliminating defects associated with some manufacturing processes.

Learning outcomes:

Upon completion of this course the participant will be able to:

- Learn the importance of the processing-properties-performance relationships in heat treatable materials.
- Able to apply materials engineering concepts in selecting or designing a process, or material, to meet a specific requirement specification of a heat treatable metallic component.
- Learn how to identify practical materials engineering problems in the technologies of the heat treatment of ferrous and non-ferrous alloys.
- Gain knowledge and understanding of a range of tests used to evaluate the heat treatment of materials.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Engineers working in the fields of Manufacturing and Maintenance.

Course References:

Kalpakjian, Serope, "Manufacturing Processes For Engineering Materials", "Addison-Wesley Pub. Co.
Dieter, G.E. "Mechanical Metallurgy", McGraw – Hill.
Budinski, K.G., "Engineering Materials: Properties and selection", Englewood Cliffs.
ASM Handbook, ASM International.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
- Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
- Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

- Registration:** AAST Admission Registration Online Other: -----
- Sponsor:** Individual Funded By: 5000 L.E. Egyptian Company
- Fee's:** L.E. 800 \$ 200 Other: 2000 \$ Non Egyptian Company
- Documents required:** Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name: Selection of Engineering Materials

Institute/Centre: College of Engineering and Technology **Department:** Industrial & Mgt. Eng.

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue: AASTMT- Abu Keer

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- The Role of Design and Materials in Industry
- The product life cycle, and Recycling of Materials
- Engineering Materials and their Properties
- Performance of Materials in Service.
- Selection of Materials to Resist Failure
- The Materials Selection Process
- Materials Selection Charts.
- Property Limits and Material Indices.
- The Selection Procedure.
- Selection of Material and Shape.
- Process Selection Charts.
- Case Studies.

Course Objectives:

- This Course has the following objectives:
- Enabling Engineers to identify the most suitable materials for a given application from the full range of materials and available section shapes.
 - Helping Engineers to find substitute materials to replace a failed component within the limits of shape and process availability.

Learning outcomes:

- Upon completion of this course the participant will be able to:
- Understand the relationships between the various stages of design and the mechanics of materials
 - Apply systematic procedures to make a rational choice in selecting a material or process.
 - Select a process or material, which best matches the requirements of a design.
 - Select materials from broad information sources on materials properties through the use of charts, materials indices, available software, and other sources.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Engineers working in the fields of Materials, Design, Manufacturing, and Maintenance.

Course References:

Ken Budinski and Michael K. Budinski, "Engineering Materials: Properties and Selection", Prentice Hall.

James Jacobs and Thomas Kilduff, "Engineering Materials Technology: Structures, Processing, Properties, and Selection", Prentice Hall.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
- Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
- Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

Registration: AAST Admission Registration Online Other: -----

Sponsor: Individual Funded By: 5000 L.E. Egyptian Company

Fee's: L.E. 800 For Egyptian \$ 200 For non Egyptian Other: 2000 \$ Non Egyptian Company

Documents required: Registration form ID/Passport copy Photo



Arab Academy for Science, Technology and Maritime Transport

Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Overall Framework for Production Planning and Scheduling.
- Demand Forecasting.
- Medium-Range Aggregate Production Planning.
- Short-Range Production Scheduling.

Course Objectives:

To define the Production Planning and Scheduling system in the management structure
To introduce different scheduling models
To learn the crucial issues in the implementation of a scheduling model.

Learning outcomes:

Upon successful completion of the course, it is expected that:

- Participants will be able to define the place of Production Planning and Scheduling in the management system and to give a correct definition of a production planning system .
- Participants will become aware of the advantages and disadvantages of various approaches and the practical limitations associated with them .

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Industrial and Manufacturing Engineers in different disciplines.

Course References:

William J Stevenson, "Operations Management with Student DVD and Power Web", McGraw-Hill.
Hill, T., "Production/ Operations Management", Allyn and Bacon, Inc.
Heizer, J and Render, D., "Production and Operations Management, "strategy and tactics"", Allyn and Bacon, Inc.
Starr, M.R., "Managing Production and Operations", Prentice Hall.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

- Registration:** AAST Admission Registration Online Other: -----
- Sponsor:** Individual Funded By: 5000 L.E. Egyptian Company
- Fee's:** L.E. 800 For Egyptian \$ 200 For non Egyptian Other: 2000 \$ Non Egyptian Company
- Documents required:** Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name: Traditional Replenishment Systems for Managing Item Inventories

Institute/Centre: College of Engineering and Technology **Department:** Industrial & Mgt. Eng.

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue: AASTMT- Abu Keer

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- The Need for Holding Inventory.
- The Right Model for You.
- Order Quantities with Constant Demand.
- Lot Sizing for Time-Varying Demand.
- Individual Items with Probabilistic Demand

Course Objectives:

An entry level short course that covers basic techniques for inventory management and control of individual independent items

Learning outcomes:

Upon successful completion of the course, it is expected that participants will gain knowledge and understanding of the basic inventory models used in industry.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Industrial and Management Engineers – Production Engineers – Materials Planning and Inventory Managers and Staff.

Course References:

Steven Nahmias, "Production and Operations Analysis with Student CD", McGraw-Hill.

Edward A. Silver, David F. Pyke, and Rein Peterson, "Inventory Management and Production Planning and Scheduling", John Wiley & Sons.



Training Course Information Form

Course Information

Course Name: Replenishment Systems for Special Classes of item Inventories

Institute/Centre: College of Engineering and Technology **Department:** Industrial & Mgt. Eng.

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue: AASTMT- Abu Keer

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Managing the Most Important (Class A) Inventories.
- Managing Routine (Class C) Inventories.
- Style Goods and Perishable Items.
- Dependant Demand Inventories and Material Requirements Planning.

Course Objectives:

An advanced course in inventory management and control of items with special classes

Learning outcomes:

Upon successful completion of the course, it is expected that participants will gain knowledge and understanding of some of the advanced inventory models used in industry.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Industrial and Management Engineers – Production Engineers – Materials Planning and Inventory Managers and Staff.

Course References:

Steven Nahmias, "Production and Operations Analysis with Student CD", McGraw-Hill.

Edward A. Silver, David F. Pyke, and Rein Peterson, "Inventory Management and Production Planning and Scheduling", John Wiley & Sons.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

- Registration:** AAST Admission Registration Online Other: -----
- Sponsor:** Individual Funded By: 5000 L.E.
Egyptian Company
- Fee's:** L.E. 800 \$ 200 Other: 2000 \$
For Egyptian For non Egyptian Non Egyptian Company
- Documents required:** Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Science of Manufacturing and Basic Factory Dynamics.
- Sources of Variability in Production Lines.
- Corrupting Influence of Variability.
- Methods for Handling Variability of Production Lines

Course Objectives:

Using a systematic procedure for understanding the underlying behavior of most manufacturing systems, that helps in improving the performance of such systems.

Learning outcomes:

- Upon completion of this course the participant will be able to:
- Review the elementary concepts required for describing manufacturing systems.
 - Identify the points of leverage in a plant, evaluate the impacts of the proposed changes, and coordinate improvement efforts.
 - Bring together the disparate components of a system into an effective whole.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

Who should attend:

Industrial and Management Engineers – Production Engineers – Materials Planning and Inventory Managers and Staff.

Course References:

William J Stevenson, "Operations Management with Student DVD and Power Web", McGraw-Hill.
Hopp, W. J. and Spearman, M. L., "Factory Physics", McGraw-Hill.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

Registration: AAST Admission Registration Online Other: -----

Sponsor: Individual Funded By: 5000 L.E. Egyptian Company

Fee's: L.E. 800 For Egyptian \$ 200 For non Egyptian Other: 2000 \$ Non Egyptian Company

Documents required: Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Introduction to Modelling and Simulation.
- Monte Carlo Simulation using MS Excel.
- Simulation of Queuing Systems.
- Simulation of Inventory Systems.
- Simulation of Reliability Systems.
- Other Applications of Spreadsheet Simulation

Course Objectives:

An introductory course to modeling and simulation that covers the basic concepts related to that topic with an emphasis on spreadsheets simulation An introductory course to modeling and simulation that covers the basic concepts related to that topic with an emphasis on spreadsheets simulation

Learning outcomes:

- Upon completion of this course the participant will be able to:
- Understand the broad applicability of discrete-event process simulation to industrial engineering problems.
 - Know the steps required to undertake a successful simulation analysis.
 - Learn analytical techniques for interpreting input data and output results pertinent to simulation models.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

Who should attend:

Industrial and Management Engineers – Production Engineers – Materials Planning and Inventory Managers and Staff.

Course References:

Jerry Banks, John Carson, Barry L. Nelson, and David Nicol, "Discrete-Event System Simulation", Prentice Hall.
Averill Law, "Simulation Modeling and Analysis with Expertfit Software", McGraw-Hill.
Larry H Leemis and Stephen K. Park, "Discrete-Event Simulation: A First Course", Prentice Hall.
Stewart Robinson, "Simulation: The Practice of Model Development and Use", John-Wiley & Sons.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

- Registration:** AAST Admission Registration Online Other: -----
- Sponsor:** Individual Funded By: 5000 L.E. Egyptian Company
- Fee's:** L.E. 800 \$ 200 Other: 2000 \$ Non Egyptian Company
 For Egyptian For non Egyptian
- Documents required:** Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Introduction to Modeling and Simulation.
- Arena's Basic Processes Template.
- Arena's Advanced Processes Template.
- Input Analyzer.
- Output Analyzer.
- Application to Manufacturing and Services Systems.

Course Objectives:

Focuses on the use of the Arena simulation environment in the modelling and simulation of manufacturing and services systems

Learning outcomes:

Upon completion of this course the participant will be able to:

- Construct conceptual models and understand the importance of model conceptualization.
- Develop their own simulation models using Arena.
- Understand the different ways of developing complex models through a set of case studies in different manufacturing and services areas.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Industrial and Management Engineers – Production Engineers – Materials Planning and Inventory Managers and Staff.

Course References:

W. David Kelton, "Simulation with Arena with CD", McGraw-Hill.
Charles R. Harrell, Biman K. Ghosh, and Royce O. Bowden, "Simulation Using Promodel with CD-ROM", McGraw-Hill.
Jerry Banks, John Carson, Barry L. Nelson, and David Nicol, "Discrete-Event System Simulation", Prentice Hall.
Averill Law, "Simulation Modeling and Analysis with Expertfit Software", McGraw-Hill.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
- Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
- Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

- Registration:** AAST Admission Registration Online Other: -----
- Sponsor:** Individual Funded By: 5000 L.E. Egyptian Company
- Fee's:** L.E. 800 For Egyptian \$ 200 For non Egyptian Other: 2000 \$ Non Egyptian Company
- Documents required:** Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Introduction to Modeling and Simulation.
- Extend Manufacturing.
- Extend Business Process Reengineering.
- Use of Stat fit.
- Application to Manufacturing and Services Systems.

Course Objectives:

Focuses on the use of the Extend simulation environment in the modeling and simulation of manufacturing and services systems.

Learning outcomes:

Upon completion of this course the participant will be able to:

- Construct conceptual models and understand the importance of model conceptualization.
- Develop their own simulation models using Extend.
- Understand the different ways of developing complex models through a set of case studies in different manufacturing and services areas.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Industrial and Management Engineers – Production Engineers – Materials Planning and Inventory Managers and Staff.

Course References:

Manuel Laguna and Johan Marklund, "Business Process Modeling, Simulation and Design", Prentice Hall.
W. David Kelton, "Simulation with Arena with CD", McGraw-Hill.
Charles R. Harrell, Biman K. Ghosh, and Royce O. Bowden, "Simulation Using Promodel with CD-ROM", McGraw-Hill.
Averill Law, "Simulation Modeling and Analysis with Expertfit Software", McGraw-Hill.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

- Registration:** AAST Admission Registration Online Other: -----
- Sponsor:** Individual Funded By: 5000 L.E. Egyptian Company
- Fee's:** L.E. 800 For Egyptian \$ 200 For non Egyptian Other: 2000 \$ Non Egyptian Company
- Documents required:** Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name:

Institute/Centre: **Department:**

Type: Program Course Workshop

Course Duration: 5 days 3 days 1 days Other: 10 days

Course Conducted: Local International
Indicate: -----

Course Venue:

Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Linear Programming Model Formulation and Solution.
- Forecasting.
- Aggregate Planning.
- Transportation and Transshipment Models.
- Inventory Management.

Course Objectives:

Coverage of the most popular quantitative techniques used in management science and their implementation using spreadsheets.

Learning outcomes:

Upon completion of this course the participant will be able to:

- Develop real expertise in business modelling.
- Demonstrate knowledge and understanding of management science topics.
- Experience a broader coverage of Excel applications.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

Industrial and Management Engineers – Production Engineers – Materials Planning and Inventory Managers and Staff.

Course References:

Bernard W. Taylor, "Introduction to Management Science with Student CD", Prentice Hall.
William J Stevenson and Ceyhun Ozgur, "Introduction to Management Science with Spreadsheets and Student CD", McGraw-Hill.

No. of Participants/course: 5-10 10-15 15-20 Other: -----

Qualifications of Participants:

- Higher education
- Environmental awareness

- Teamwork skills
- Average English

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Flip charts S/W Other: -----

Course Evaluation

- Written Examination Written Report(s) Oral Presentation Attendance
 Delegates Participation

Certificate Issue: Local Premises AASTMT International

Course Registration

- Registration:** AAST Admission Registration Online Other: -----
- Sponsor:** Individual Funded By: 5000 L.E. Egyptian Company
- Fee's:** L.E. 800 For Egyptian \$ 200 For non Egyptian Other: 2000 \$ Non Egyptian Company
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