
CONSTRUCTION **&** **B**UILDING

ENGINEERING **C**OURSES

Contents

CONSTRUCTION & BUILDING ENGINEERING COURSES	1
Construction Planning and Scheduling with Primavera	3
Conditions of Contract for Construction FIDIC Red Book - 1999.....	5
Financial Management in Construction	7
Business Concepts for Managers of Construction Firms	9
Financial / Economic Feasibility Studies in Construction	11
Value Engineering.....	13
Introduction to Quality Control in Construction.....	15
Structural Analysis Using SAP 2000 (SAP 2000 (I))	17
Advanced Structural Analysis Using SAP 2000.....	19
Formwork Design.....	21
Construction Equipment	23
Health and Safety in Construction	25
Concrete Mix Design.....	27
Advances in the Technology of Portland Cement Concrete Industry	29
Durability of Portland Cement Concrete.....	31
Masonry in Construction	33
Testing of Construction Materials According to the Egyptian Code.....	35
Special Types of Portland Cement Concrete	37
Mix Design, Testing and Quality Control of Concrete	39
Quality Control for Concrete Production (According to ACI 214R02).....	41
Inspection, Maintenance, Evaluation, Strengthening and REPAIR OF STRUCTURES.....	43
Introduction to the Current Egyptian Code of Practice for Concrete Design.....	45
Introduction to Structural Dynamics	47
Design for Dynamic Loads	49
Earthquake Design	51
Tall Buildings.....	53
Reliability in Civil Engineering	55
Elements Health Monitoring of Structures	57
Design for Cold-Formed Steel Structures	59
Structural Design of Building and Industrial Facilities for Blast Loads and Accident Explosions.....	61
Environment Impact Assessment for Projects	63
Environment and Pollution	65
Port development and Planning	67
Design of Port Structures.....	69
Integrated Coastal Zone Management.....	71
Traffic Engineering	73
GIS for Construction Engineering	75
Surveying and Practical Use of Total Station.....	77



Arab Academy for Science, Technology and Maritime Transport

Training Course Information Form

Course Information

Course Name: Construction Planning and Scheduling with Primavera

Institute/Centre: _____ **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Introduction to planning and scheduling in construction
- Working with projects
- Working with activities
- Creating a schedule
- Layouts and filtering
- Calendars
- Managing resources
- Reports and graphics

Course Objectives:

- To introduce construction, civil, electrical, mechanical, and architectural engineers to construction planning
- Train the participating engineers on the use of primavera

Learning outcomes:

Familiarity with construction planning and the ability to use the primavera program

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

- Construction, civil, electrical, mechanical, and architectural engineers

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course References:

- Hinze, J. Construction Planning and Scheduling, Prentice Hall, USA, 2003.
- Newitt, J., Construction Scheduling Principles and Practices, Prentice Hall, 2004.
- Pierce, D., Project Scheduling and Management for Construction, Reed Construction Data, USA, 2005.
- Feigenbaum, L., Construction scheduling with Primavera Project Planner, Prentice Hall, 2001.
- Harris, P., Project Planning and Scheduling using Primavera Contractor, Ver. 4.1, for the Construction Industry, John Wiley and Sons, 2005.
- Books available at the AASTMT library

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

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

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: 8000 L.E. Egyptian Company

Fee's: L.E. 600 \$ 200 Other: 2000 \$

For Egyptian For non Egyptian 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: Conditions of Contract for Construction FIDIC Red Book - 1999

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Introduction to contract management
- Introduction to FIDIC contracts
- Overview of the conditions of contracts for Construction in FIDIC Red Book 1999
- Managing claims / change order
- Dispute resolution

Course Objectives:

To introduce construction engineers to the conditions of contract for Construction FIDIC Red Book - 1999

Learning outcomes:

Full awareness of the Construction FIDIC Red Book - 1999

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

- Construction engineers, contract engineers and project managers

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course References:

- Collier, K. Construction Contracts, Prentice Hall, 2001.
- Murdoch, J. and Hughes, W., Construction Contracts, Spon Press, UK, 2000.
- Savage, C., Mitchell K. J., Construction Forms and Contracts, Craftsman Book Company, 2003
- Hinze, J., Construction Contracts, McGraw-Hill Science, USA, 2000.
- Phillips, C. S., Construction Contract Administration, SME, 1999
- Fidic Conditions of Contract for Construction – Red Book, FIDIC, 1999.
- Knutson, Robert, Fidic: An Analysis of International Construction Contracts (International Bar Association), Kluwer Law International, The Netherlands, 2005.
- Books available at the AASTMT library.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

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

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: 8000 L.E. Egyptian Company
- Fee's:** L.E. 600 \$ 200 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: Financial Management in Construction

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Cost engineering and planning.
- Cost control and updating.
- Cash flow analysis of construction of projects.
- Basics of accounting: accounting terms; accounting systems and transactions; and compilation of financial statements.
- Reading and understanding financial statements.
- Financial analysis – basic financial ratios for profitability, liquidity, leverage and efficiency.
- Failure / bankruptcy analysis for construction firms.

Course Objectives:

To introduce construction engineers, project managers, and construction firms executives to the concepts of financial management on the project and firm levels

Learning outcomes:

Knowledge of financial management concepts

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

- Construction engineers, project managers, and construction firms executives

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course References:

- Peterson, S. J., Construction Accounting and Financial Management, Prentice Hall, USA, 2004.
- Atrian, "Construction Accounting," Prentice Hall, Englewood Cliffs, N.J., USA, 1990.
- Coombs & Polwer, Construction Accounting and Financial Management, McGraw Hill, New York, 1995.
- Jackson I.J. Jackson, III, "Financial Management for Contractors," McGraw-Hill, New York, USA, 1990
- Books available at the AASTMT library

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

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

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: 8000 L.E. Egyptian Company
- Fee's:** L.E. 600 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: Business Concepts for Mangers of Construction Firms

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Characteristics of the construction industry
- Aspects and nature of construction project management
- Strategic management
- Risk management
- Human resource management
- Health and safety in construction
- Business performance management
- Quality management
- Process management
- Knowledge management
- Sustainable construction

Course Objectives:

To introduce the managers of construction firms to business concepts necessary to manage construction firms

Learning outcomes:

Be aware of business concepts needed to be applied in construction firms

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Who should attend:

- Senior and executive management of contracting and consulting firms working in the construction industry

Course References:

- Kerzner, Harold, Project Management: A Systems Approach, John Wiley & Sons, New Jersey, USA, 2006.
- A Guide to the Project Management Body of Knowledge – PMBOK, Project Management Institute, 2004.
- Fisk, R., Construction Project Administration, 2003.
- Smith, N., Merna, T., and Jobling, P., Managing Risk: In Construction Projects, Blackwell Publishing, UK, 2006.
- Halpin, D. W., Construction Management, John Wiley & Sons, 2005.
- Kibert, C., Sustainable Construction: Green Building Design and Delivery, Wiley, 2005.
- LEVY S.M. , "Project Management for Construction," McGraw Hill Inc., N.Y., USA, 2002.
- Books available at the AASTMT library

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

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

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: 8000 L.E. Egyptian Company

Fee's: L.E. 600 \$ 200 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: Financial / Economic Feasibility Studies in Construction

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop
Course Duration: 5 days 3 days 1 days Other: -----
Course Conducted: Local International
Indicate: -----
Course Venue: AASTMT
Course Language: English Arabic Both Other: -----

Course Description

Course Outlines:

- Introduction to engineering economics
- Time value of money
- Types of feasibility studies
- Measures of worth for projects
- Project selection
- Cost benefit analysis

Course Objectives:

To introduce construction engineers, project managers, and construction firm executives to the concepts of producing financial / economic feasibility studies for construction projects

Learning outcomes:

Being able of conducting feasibility studies for construction projects

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

- Construction engineers, project managers, and construction firms executives

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course References:

- Tang, S. L., Economic Feasibility of Projects: Managerial and Engineering Practice, The Chinese University Press, 2004.
- Barrie, D.S. and Paulson, B.C., Professional Construction Management, McGraw Hill Inc., N.Y., USA, 1992.
- McCaffer, R., Harris, F. and Edum-Fotwe, F., Modern Construction Management, 2004.
- Books available at the AASTMT library

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

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

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: 8000 L.E. Egyptian Company
- Fee's:** L.E. 600 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:

Value Engineering

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- Value engineering concepts and definitions
- Value engineering study process and procedures
- Function analysis
- Level of abstraction and selection of alternatives
- Evaluation techniques
- Presenting value studies
- Whole life cycle costing
- Construction case studies and applications

Course Objectives:

To introduce engineers the concepts of value engineering and its applications in the construction industry

Learning outcomes:

Knowledge and ability of application of value engineering in construction

Course includes:

Theoretical

Tutorial

Laboratory

Workshop

Site Visit

Course Prerequisites:

None

Who should attend:

- Construction engineers, cost engineers and project managers

Course References:

- Kerzner, Harold, Project Management: A Systems Approach, John Wiley & Sons, New Jersey, USA, 2006.
- A Guide to the Project Management Body of Knowledge – PMBOK, Project Management Institute, 2004.
- Fisk, R., Construction Project Administration, 2003.
- Halpin, D. W., Construction Management, John Wiley & Sons, 2005.
- LEVY S.M. , "Project Management for Construction," McGraw Hill Inc., N.Y., USA, 2002.
- Books available at the AASTMT library

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- V. Projector Data show PC Manual Handouts
- White Board
- Books Handouts 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: 8000 L.E. Egyptian Company
- Fee's:** L.E. 600 \$ 200 Other: 2000 \$
- For Egyptian For non Egyptian 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: Introduction to Quality Control in Construction

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Introduction to quality concepts
- The four stages of quality [inspection and testing – quality control – quality assurance – total quality management]
- Responsibility for quality
- Statistical process control
- Introduction to the evaluation of strength test results of concrete

Course Objectives:

- To introduce the construction engineers trainees to the concept of quality
- To provide an introduction to the use of statistical quality control tools in construction industry

Learning outcomes:

Familiarity with quality control concepts

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

- All construction and civil site engineers and project managers
- All quality control engineers connected with the concrete construction

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course References:

- Tang, S. L., Ahmed, S. M., Aoieong, R. T., Poon, S. W., Construction Quality Management, Hong Kong University Press, Hong Kong, 2005.
- McCabe, S. "Quality Improvement Techniques in Construction," Addison Wesley Longman limited, Edinburgh Gate, England 1998.
- McCaffer, R., Harris, F. and Edum-Fotwe, F., Modern Construction Management, 2004.
- Thorpe, Brian and Sumner, Peter, Quality Management in Construction, Gower Publishing, UK, 2005.
- Kubal, M.T. "Engineering Quality in Construction: Partnering and TQM," McGraw Hill Inc., New York, 1994.
- Besterfield, D.M. "Quality Control," Prentice Hall, Englewood Cliffs, USA 1994.
- ACI Committee 214, "Evaluation of strength test results of concrete," ACI 214R-02, American Concrete Institute, Detroit, MI, USA, 2002
- Books available at the AASTMT library

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board
- V. Projector
- Data show
- PC
- Manual
- Handouts
- Books
- Handouts
- 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: 8000 L.E. Egyptian Company
- Fee's:** L.E. 600 \$ 200 Other: 2000 \$ Non Egyptian Company
- Documents required:** Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name: **Structural Analysis Using SAP 2000 (SAP 2000 (I))**

Institute/Centre: _____ **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Introduction to SAP 2000
- Analysis of 2D Structures
- Analysis of R.C. Structures
- Analysis of steel structures
- Analysis of Shallow foundations
- Analysis of Flooring Systems
- Analysis of Deep (pile) foundations

Course Objectives:

The objective of the course in to acquaint the students with the structural analysis using structural analysis program SAP 2000.

Learning outcomes:

acquaint the students with the structural analysis using structural analysis program SAP 2000.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

ICDL

Who should attend:

- Design civil engineers.
- Civil and Construction Engineering Department students.

Course References:

This form should be completed by the accountable who conduct courses inside or outside A.R.E

- Ghoneim, M, and El-Mihilmy, M, "Design of Reinforced Concrete Structures", First Edition, Vol 1 and 2, 2005
- MACHALY, EL-SAYED BAHAA, "Behaviour, Analysis and design of Structural Steel Elements", Vol. 1, Cairo university, Egypt.
- MACHALY, EL-SAYED BAHAA, "Behaviour, Analysis and design of Steelwork Connections", Vol. 3, Cairo university, Egypt.
- DAS, Braja M., Principles of Foundation Engineering, Brooks-Cole, London, 1998

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E. Egyptian Company
Fee's: L.E. 600 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: Advanced Structural Analysis Using SAP 2000

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Analysis of traditional building
- Analysis of flat slabs
- Analysis of stairs
- Analysis of raft foundations
- Analysis of retaining structures
- Analysis of ground tanks
- Analysis of elevated tanks

Course Objectives:

The objective of the course is to analyze skeleton reinforced concrete/steel structures using SAP 2000 such as traditional buildings, flat slabs, stairs, raft foundations, retaining structures, ground tanks and elevated water tanks.

Learning outcomes:

Acquaint the students with the structural analysis using structural analysis program SAP 2000.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Structural Analysis Using SAP 2000

(SAP 2000 (I))

Who should attend:

- Design civil engineers.
- Civil and Construction Engineering Departments students .

Course References:

- Ghoneim, M, and El-Mihilmy, M, "Design of Reinforced Concrete Structures", First Edition, Vol 1 and 2, 2005
- MACHALY, EL-SAYED BAHAA, "Behaviour, Analysis and design of Structural Steel Elements", Vol. 1, Cairo university, Egypt.
- MACHALY, EL-SAYED BAHAA, "Behaviour, Analysis and design of Steelwork Connections", Vol. 3, Cairo university, Egypt.
- DAS, Braja M., Principles of Foundation Engineering, Brooks-Cole, London, 1998

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E.
Egyptian Company

Fee's: L.E. 600 \$ 200 Other: 2000 \$
For Egyptian For non Egyptian 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:

Formwork Design

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- Introduction to formwork system
- Loads on formwork
- Design of horizontal formwork systems
- Design of vertical formwork systems
- Design of special formwork systems

Course Objectives:

The objective of the course is to design horizontal, vertical and special formwork systems.

Learning outcomes:

Design of different formwork systems.

Course includes:

Theoretical

Tutorial

Laboratory

Workshop

Site Visit

Course Prerequisites:

Design of reinforced concrete structures

Building construction methods

Who should attend:

- Construction engineers.
- Construction & Building Departments students .

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course References:

- Nunnally, S.W., "Construction Methods and Management," Prentice Hall, New Jersey, 1993.
- Peurifoy, R.L., Ledbetter, W.B., and Schexnayder, G.J., "Construction Planning, Equipment, and Methods," McGraw Hill Co., New York, 1996.
- Peurifoy, R.L., and Oberlender, G.D., "Formwork for Concrete Structures," McGraw Hill Co., New York, 1996.
- Illingworth, J.R., "Construction Methods and Planning," E & FN SPON, London, 1993.
- Harris, F., "Modern Construction & Ground Engineering Equipment and Methods," Longman Group Co., U.K., 1994.
- Books available at the AASTMT library

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E.
Egyptian Company

Fee's: L.E. 600 \$ 200 Other: 2000 \$
For Egyptian For non Egyptian 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: Construction Equipment

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Introduction
- Earth moving basics
- Excavators (Shovels, Hoes, Draglines and Clamshells)
- Dozers and loaders
- Trucks and wagons

Course Objectives:

The objective of the course is to acquaint students with construction equipment. To provide knowledge for equipment used in the heavy construction such as shovels, hydraulic excavators, draglines, clamshells, loaders and dozers....etc. To estimate the equipment production.

Learning outcomes:

Selecting the suitable equipment for construction
Estimating equipment production
How to increase equipment production

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

Building construction methods

Who should attend:

- Construction Engineers.
- Construction & Building Departments students .

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course References:

- Peurifoy, R.L., Ledbetter, W.B., and Schexnayder, G.J., "Construction Planning, Equipment, and Methods," McGraw Hill Co., New York, 1996.
- Harris, F., "Modern Construction & Ground Engineering Equipment and Methods," Longman Group Co., U.K., 1994.
- Nunnaly, S.W., "Construction Methods and Management," Prentice Hall, New Jersey, 1993.
- Peurifoy, R.L., and Oberlender, G.D., "Formwork for Concrete Structures," McGraw Hill Co., New York, 1996.
- Illingworth, J.R., "Construction Methods and Planning," E & FN SPON, London, 1993.
- Books available at the AASTMT library

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
- Books Handouts 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: 8000 L.E. Egyptian Company
- Fee's:** L.E. 600 \$ 200 Other: 2000 \$
- For Egyptian For non Egyptian 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:

Health and Safety in Construction

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- Health and safety foundations
- General site issues- Hazards and control
- Working at height- Hazards and control
- Excavation and control- Hazards and control
- Movement of people and vehicles - Hazards and control
- Work equipment - Hazards and control

Course Objectives:

The objective of the course is to acquaint students with the importance of health and safety in the construction field.

Learning outcomes:

Applying safety regulations in the construction industry to minimize the accidents

Course includes:

Theoretical

Tutorial

Laboratory

Workshop

Site Visit

Course Prerequisites:

None

Who should attend:

- Construction employees.

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course References:

- PHIL Hughes, "Introduction to Health and Safety in Construction, "Ferrett, 2005.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E. Egyptian Company

Fee's: L.E. 600 \$ 200 Other: 2000 \$
 For Egyptian For non Egyptian 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: Concrete Mix Design

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Introduction to the properties and testing of Portland cement concrete
- Introduction to the concept of concrete mixture design.
- Criteria used to establish minimum required average strength
- ACI method for normal concrete mix design
- Evaluation of concrete strength data

Course Objectives:

- To introduce the engineer trainee to the concept of concrete mixture design with respect to the guiding rules of the American Concrete Institute / Egyptian code requirement.

Learning outcomes:

Ability of designing concrete mixtures in the light of American Concrete Institute / Egyptian code requirement.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

This form should be completed by the accountable who conduct courses inside or outside A.R.E



Training Course Information Form

Course Information

Course Name: Advances in the Technology of Portland Cement Concrete Industry

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program Course Workshop

Course Duration:

5 days 3 days 1 days Other: -----

Course Conducted:

Local International
Indicate: -----

Course Venue:

AASTMT

Course Language:

English Arabic Both Other: -----

Course Description

Course Outlines:

- Introduction to the properties and testing of portland cement concrete
- Chemical admixtures for concrete
- Mineral admixtures for concrete
- Concrete at early ages
- Special types of concrete
- Non-destructive testing of Portland cement concrete
- Shrinkage and creep of Portland cement concrete

Course Objectives:

- To introduce the engineer trainee to the latest advances and technologies in the field of the portland cement concrete.

Learning outcomes:

Familiarity with latest technology of Portland cement concrete

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

- All construction and civil engineers directly related to site concrete construction.

Course References:

- M Neville, " Properties of concrete, " 3 Edition, longman scientific and technical, England, 1995.
- P.K.Mehta and P.J.Monterio, " Concrete: Structure, properties, and Materials,"2nd Edition,Prentice-Hall,Englewood Cliffs,USA,1994.
- American Concrete institute, " Manual for concrete partice," Parts 1 5, detroit, USA, 1995.
- M.Sidney and Y.Francis, " Concrete " printice-Hall, Inc. Englewood cliffes, N.J.07632.1981.
- M.S. Mamlouk, J. P. Zaniewski, " Materials for Civil and Construction Engineers," 2nd Edition, Pearson Education, Inc., Pearson Prentice Hall, Upper Saddle River, NJ USA, 2006.
- J. F. Young, S. Mindess, R. J. Gray and A. Bentur, "The Science and Technology od Civil Engineering Materials," Prentice Hall, Upper Saddle River, NJ USA, 1998.
- Shan Somayaji,"Civil Engineering Materials", prentic-Hall,Englewood Cliffs, USA,1995.
- J.M.Illston," Construction Materials their nature and behavior,"E.&FN Spon,1994.
- ESS Standards.
- ASTM Standards.
- Derucher,K.N.,Korfiatis, G.P.,and Ezeldin,A.S.,"Materials for civil and Highway Engineers" 3rd Edition,Prentice-Hall, Englwood Cliffs, N.J.,USA,1994.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
- Books Handouts 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: 8000 L.E. Egyptian Company
- Fee's:** L.E. 600 \$ 200 Other: 2000 \$ Non Egyptian Company
- Documents required:** Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name: Durability of Portland Cement Concrete

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Introduction to durability of portland cement concrete
- Permeability of portland cement concrete.
- Chemical attacks
- Alkali Silica reaction
- Sulfate attack
- Corrosion of steel reinforcement

Course Objectives:

- To introduce the issue of concrete durability to the engineer trainee.
- To provide a brief insight about the different factors affecting the portland cement concrete mechanism of attack and the method of protection for different concrete structures.

Learning outcomes:

Be aware of concrete durability, as well as methods of concrete structures protection.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

- All construction and civil engineers directly related to site concrete construction.

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course References:

- M Neville, " Properties of concrete, " 3 Edition, longman scientific and technical, England, 1995.
- P.K.Mehta and P.J.Monterio, " Concrete: Structure, properties, and Materials,"2nd Edition,Prentice-Hall,Englewood Cliffs,USA,1994.
- American Concrete institute, " Manual for concrete partice," Parts 1 5, detroit, USA, 1995.
- M.Sidney and Y.Francis, " Concrete " printice-Hall, Inc. Englewood cliffes, N.J.07632.1981.
- M.S. Mamlouk, J. P. Zaniewski, " Materials for Civil and Construction Engineers," 2nd Edition, Pearson Education, Inc., Pearson Prentice Hall, Upper Saddle River, NJ USA, 2006.
- J. F. Young, S. Mindess, R. J. Gray and A. Bentur, "The Science and Technology od Civil Engineering Materials," Prentice Hall, Upper Saddle River, NJ USA, 1998.
- Shan Somayaji,"Civil Engineering Materials", prentic-Hall,Englewood Cliffs, USA,1995.
- J.M.Illston," Construction Materials their nature and behavior,"E.&FN Spon,1994.
- ESS Standards.
- ASTM Standards.
- Derucher,K.N.,Korfiatis, G.P.,and Ezeldin,A.S.,"Materials for civil and Highway Engineers" 3rd Edition,Prentice-Hall, Englwood Cliffs, N.J.,USA,1994.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board
 V. Projector
 Data show
 PC
 Manual
 Handouts
 Books
 Handouts
 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: 8000 L.E. Egyptian Company

Fee's: L.E. 600 \$ 200 Other: 2000 \$ Non Egyptian Company
 For Egyptian For non Egyptian

Documents required: Registration form ID/Passport copy Photo



Arab Academy for Science, Technology and Maritime Transport

Training Course Information Form

Course Information

Course Name:

Masonry in Construction

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- Introduction to the masonry in construction
- Masonry units
- Properties of different masonry units
- Testing of different masonry units
- Mortar, Grout and Plaster
- Masonry Construction

Course Objectives:

- To introduce the engineer trainee to the properties and testing of different masonry units and grouts used in masonry construction.

Learning outcomes:

Knowledge of masonry properties and testing principles

Course includes:

Theoretical

Tutorial

Laboratory

Workshop

Site Visit

Course Prerequisites:

None

Who should attend:

- All construction and civil engineers directly related to site construction.

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course References:

- M.S. Mamlouk, J. P. Zaniewski, " Materials for Civil and Construction Engineers," 2nd Edition, Pearson Education, Inc., Pearson Prentice Hall, Upper Saddle River, NJ USA, 2006.
- P.K.Mehta and P.J.Monterio, " Concrete: Structure, properties, and Materials,"2nd Edition,Prentice-Hall,Englewood Cliffs,USA,1994.
- J. F. Young, S. Mindess, R. J. Gray and A. Bentur, "The Science and Technology of Civil Engineering Materials," Prentice Hall, Upper Saddle River, NJ USA, 1998.
- Shan Somayaji,"Civil Engineering Materials", prentic-Hall,Englewood Cliffs, USA,1995.
- J.M.Illston," Construction Materials their nature and behavior,"E.&FN Spon,1994.
- American Concrete institute," Manual for concrete partice," Parts 1- 5, Detroit, USA, 1995.
- ESS Standards.
- ASTM Standards.
- Derucher,K.N.,Korfiatis, G.P.,and Ezeldin,A.S.,"Materials for civil and Highway Engineers" 3rd Edition,Prentice-Hall, Englwood Cliffs, N.J.,USA,1994.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E. Egyptian Company

Fee's: L.E. 600 \$ 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: Testing of Construction Materials According to the Egyptian Code

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- Introduction to the properties and testing of construction materials.
- Aggregate testing
- Portland cement testing
- Mixing and curing water testing
- Fresh concrete testing
- Hardened concrete testing
- Non-destructive testing of concrete
- Reinforcing steel testing
- Masonry testing

Course Objectives:

- To introduce the engineer trainee to the testing concept of the different construction materials such as aggregate, Portland cement, concrete, mixing and curing water, steel reinforcement, masonry ... etc.

Learning outcomes:

Know how to test various construction materials

Course includes:

Theoretical

Tutorial

Laboratory

Workshop

Site Visit

Course Prerequisites:

None

Who should attend:

- All construction and civil engineers directly related to site construction.

Course References:

- W. D. Callister Jr, "Materials Science and Engineering: An Introduction," John Wiley & Sons, Inc, Canada, 1994
- Handouts will be available on demand subject to course requirements.
- BENHAM, P. and CRAWFORD, Z.R., "Mechanics of Engineering Materials " Longman Group, 1981.
- J. F. Young, S. Mindess, R. J. Gray and A. Bentur, "The Science and Technology of Civil Engineering Materials," Prentice Hall, Upper Saddle River, NJ USA, 1998.
- M.S. Mamlouk, J. P. Zaniewski, "Materials for Civil and Construction Engineers," 2nd Edition, Pearson Education, Inc., Pearson Prentice Hall, Upper Saddle River, NJ USA, 2006.
- BEER, F. and JOHNSTON, E.R., "Mechanics of Materials", McGraw-Hill, New York, USA, 1986.
- POPOR, E.P., "mechanics of Materials ", 2nd Edition, Prentice-Hall Englewood cliffs.
- R.C. HIBBELER, "Mechanics of Materials," McMillan, New York, 1991.
- R.S. KHURMI, "Strength of Materials ", S.Chand & Company, New Delhi, 1986.
- GERE & TIMOSHENKO, "Mechanics of Materials ", PWS-KENT Publisher, 1990.
- Books available in the library.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E. Egyptian Company

Fee's: L.E. 600 \$ 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: Special Types of Portland Cement Concrete

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- High strength concrete
- Self compacting concrete
- High performance concrete
- Fiber reinforced concrete
- Lightweight concrete
- Hot weathering concrete

Course Objectives:

- To provide an introduction about the general properties, uses, testing and applications of special types of Portland cement concrete.

Learning outcomes:

Complete understanding of special types of Portland cement concrete

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

- All construction and civil engineers directly related to site concrete construction.

Course References:

- M Neville, " Properties of concrete, " 3 Edition, longman scientific and technical, England, 1995.
- P.K.Mehta and P.J.Monterio, " Concrete: Structure, properties, and Materials,"2nd Edition,Prentice-Hall,Englewood Cliffs,USA,1994.
- American Concrete institute," Manual for concrete partice," Parts 1 5, detroit, USA, 1995.
- M.Sidney and Y.Francis, " Concrete " printice-Hall, Inc. Englewood cliffes, N.J.07632.1981.
- M.S. Mamlouk, J. P. Zaniwski, " Materials for Civil and Construction Engineers," 2nd Edition, Pearson Education, Inc., Pearson Prentice Hall, Upper Saddle River, NJ USA, 2006.
- J. F. Young, S. Mindess, R. J. Gray and A. Bentur, "The Science and Technology od Civil Engineering Materials," Prentice Hall, Upper Saddle River, NJ USA, 1998.
- Shan Somayaji,"Civil Engineering Materials", prentic-Hall,Englewood Cliffs, USA,1995.
- J.M.Illston," Construction Materials their nature and behavior,"E.&FN Spon,1994.
- ESS Standards.
- ASTM Standards.
- Derucher,K.N.,Korfiatis, G.P.,and Ezeldin,A.S.,,"Materials for civil and Highway Engineers" 3rd Edition,Prentice-Hall, Englwood Cliffs, N.J.,USA,1994.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E.
Egyptian Company
Fee's: L.E. 600 \$ 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: Mix Design, Testing and Quality Control of Concrete

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- What is concrete?
- Raw materials for concrete and their properties.
- Types of concrete and new advances in concrete technology.
- How to choose and test raw materials for a specific project.
- Concrete additives.
- Mix design.
- Tests for fresh concrete (theoretical).
- Tests for hardened concrete (theoretical).
- Tests for fresh concrete (field application).
- Tests for hardened concrete (field application).

Course Objectives:

This course aims at assisting engineers in choosing the suitable material, and designing the right mix for different applications. The course also aims at introducing engineers to the different tests for fresh and hardened concrete according to different current standards, as well as giving them hands on practical experience in conducting these tests.

Learning outcomes:

Ability of designing the right mix for various applications, in addition to understanding all fresh and hardened concrete tests.

Course includes:

Theoretical

Tutorial

Laboratory

Workshop

Site Visit

Course Prerequisites:

None

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Who should attend:

- Fresh engineering graduates.
- Engineers working at ready mix concrete plants.
- Quality control engineers.
- Consultants' site engineers.
- Contractors' project managers and engineers.

Course References:

- M.S. Mamlouk, J. P. Zaniewski, " Materials for Civil and Construction Engineers," 2nd Edition, Pearson Education, Inc., Pearson Prentice Hall, Upper Saddle River, NJ USA, 2006.
- M.Neville " Properties of Concrete," 3rd Edition, longman & Technical, England 1996.
- P.K.Mehta and P.J.Monterio, " Concrete: Structure, properties, and Materials,"2nd Edition,Prentice-Hall,Englewood Cliffs,USA,1994.
- Shan Somayaji,"Civil Engineering Materials", prentic-Hall,Englewood Cliffs, USA,1995.
- American Concrete institute," Manual for concrete partice," Parts 1- 5, Detroit, USA, 1995.
- ESS Standards.
- ASTM Standards.
- Tang, S. L., Ahmed, S. M., Aoieong, R. T., Poon, S. W., Construction Quality Management, Hong Kong University Press, Hong Kong, 2005.
- McCabe, S. "Quality Improvement Techniques in Construction," Addison Wesley Longman limited, Edinburgh Gate, England 1998.
- Besterfield, D.M. "Quality Control," Prentice Hall, Englewood Cliffs, USA 1994.
- ACI Committee 214, "Evaluation of strength test results of concrete," ACI 214R-02, American Concrete Institute, Detroit, MI, USA, 2002

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E. Egyptian Company
Fee's: L.E. 600 \$ 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: Quality Control for Concrete Production (According to ACI 214R02)

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- Introduction to quality in construction
- Quality control concept
- Concrete testing
- Review of statistical issues
- Variation in concrete strength
- Analysis of concrete strength data
- Criteria used to establish minimum required average strength
- Evaluation of concrete strength data

Course Objectives:

- To introduce the construction engineers trainees to the concept of quality control and its application in concrete industry
- To provide an introduction to the evaluation of concrete strength test data and the use of statistical quality control tools.

Learning outcomes:

Knowledge of quality control concepts and the use of statistical quality control tools in the evaluation of concrete strength tests

Course includes: Theoretical

Tutorial

Laboratory

Workshop

Site Visit

Course Prerequisites:

None

Who should attend:

- All construction and civil engineers directly related to site concrete construction.
- All quality control engineers connected with the concrete construction.

Course References:

- Tang, S. L., Ahmed, S. M., Aoieong, R. T., Poon, S. W., Construction Quality Management, Hong Kong University Press, Hong Kong, 2005.
- McCabe, S. "Quality Improvement Techniques in Construction," Addison Wesley Longman limited, Edinburgh Gate, England 1998.
- McCaffer, R., Harris, F. and Edum-Fotwe, F., Modern Construction Management, 2004.
- Thorpe, Brian and Sumner, Peter, Quality Management in Construction, Gower Publishing, UK, 2005. Kubal, M.T. "Engineering Quality in Construction: Partnering and TQM," McGraw Hill Inc., New York, 1994.
- Besterfield, D.M. "Quality Control," Prentice Hall, Englewood Cliffs, USA 1994.
- ACI Committee 214, "Evaluation of strength test results of concrete," ACI 214R-02, American Concrete Institute, Detroit, MI, USA, 2002
- Books available at the AASTMT library

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E.
Egyptian Company
Fee's: L.E. 600 \$ 200 Other: 2000 \$
For Egyptian For non Egyptian 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: Inspection, Maintenance, Evaluation, Strengthening and REPAIR OF STRUCTURES

Institute/Centre: Department: Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Importance of inspection and maintenance of structures.
- Investigating and evaluating structures.
- Common problems in structures, their causes, and how to identify them.
- Soil problems.
- Repair and strengthening of foundations and earth structures.
- Repair and strengthening of masonry structures.
- Repair and strengthening of reinforced concrete structures.
- Repair and strengthening of steel structures.
- Repair of structures using advanced composite materials.
- Writing technical reports in the area of inspection, maintenance, evaluation, strengthening and repair of structures.

Course Objectives:

This course aims at providing engineers with better tools for the inspecting and evaluating structures. In addition this course aims at helping engineers in identifying the different problems and deteriorations that may occur in structures and their causes. This course also aims at introducing the engineers to the different repair and strengthening techniques for different types of structures.

Learning outcomes:

Be aware of maintenance, inspection, and repair of structures

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

This form should be completed by the accountable who conduct courses inside or outside A.R.E



Training Course Information Form

Course Information

Course Name: Introduction to the Current Egyptian Code of Practice for Concrete Design

Institute/Centre: Department: Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- What is the code of practice for concrete design?
- Different sections of the code and its appendices.
- How to use the code and find what you are looking for.
- The different design philosophies in the codes.
- Material strength and properties according to the codes.
- Design for bending.
- Design for shear and torsion.
- Design for axial and combined axial and bending loads.
- Detailing and design for different types of structures.
- Using the design aids.

Course Objectives:

This course aims at introducing engineers to the current code of practice for concrete design, and the changes that occurred in it compared to the previous codes.

Learning outcomes:

Be aware of the current code for concrete design, in addition to understanding changes that had occurred to it.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

- Design engineers in consulting offices and firms.
- Technical office engineers in construction companies.

Course References:

- Ghoneim, M, and El-Mihilmy, M, "Design of Reinforced Concrete Structures", First Edition, Vol 1 and 2, 2005
- W.H.Moslay, R.Hulse, J.H.Bungey, " Reinforced Concrete Design" , MacMillan, 1990.
- Egyptian Code of Practice for Reinforced Concrete Structures, 2006.
- J.C.McCarmac, "Design of Reinforced Concrete Structures" , Harper Collins, 1993.
- Ghali, R. Favre, and M. Elbadry, "Concrete Structures: Stresses and Deformations", 3rd edition, Taylor & Francis, Inc., 2004.
- A.E. Naaman, "Prestressed Concrete: Analysis and Design", McGraw-Hill, 1983.
- C.K. Wang and C.G. Salmon, "Reinforced Concrete Design", 4th Edition, Harpor Row, 1998.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
- Books Handouts 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: 8000 L.E. Egyptian Company
- Fee's:** L.E. 600 \$ 200 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: Introduction to Structural Dynamics

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Dynamic Loads
- Linear Differential Equation of Motion
- Response to Dynamic Loading
- Single and multiple Degree of Freedom models of Structures
- Response Spectra Method of Analysis
- Modal Analysis of structures

Course Objectives:

Introducing the students to dynamics that the Structures undergo on being loaded with special dynamic loads and showing them how to model the structures and obtain the structures response to such loads

Learning outcomes:

- Calculation of dynamic loads
- Structural behavior under dynamic load
- Structural response

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

This form should be completed by the accountable who conduct courses inside or outside A.R.E

- B.SC. Civil Engineering
- B.SC. construction Engineering

Course References:

- CHOPRA, ANIL K., " Dynamics of Structures ", Theory and Applications to Earthquake Engineering, Prentice-Hall, Englewood Cliffs, USA.
- PAZ, M." Structural Dynamics: Theory and Computation", 2 nd Edition, Van Nastrand Reinhold Company, New York, 1985.
- LIN, Y."Probabilistic Theory of Structural Dynamics", McGraw-Hill Inc.,1967.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3
No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E. Egyptian Company
- Fee's:** L.E. 600 \$ 200 Other: 2000 \$ Non Egyptian Company
 For Egyptian For non Egyptian
- Documents required:** Registration form ID/Passport copy Photo



Arab Academy for Science, Technology and Maritime Transport

Training Course Information Form

Course Information

Course Name: Design for Dynamic Loads

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Structures models .
- Dynamic Loads .
- Response to structural Loads .
- Design Detailing
- Codes approaches

Course Objectives:

To introduce the students to the criteria of how to design for dynamic loads and how some codes approach the problem

Learning outcomes:

Be aware of structure models, dynamic loads and design detailing

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

Introduction to Structural Dynamics

Who should attend:

- Design Experience
- B.SC. in Civil or Construction Engineering

Course References:

- CHOPRA, ANIL K., " Dynamics of Structures ", Theory and Applications to Earthquake Engineering, Prentice-Hall, Englewood Cliffs, USA.
- PAZ, M." Structural Dynamics: Theory and Computation", 2 nd Edition, Van Nastrand Reinhold Company, New York, 1985.
- LIN, Y."Probabilistic Theory of Structural Dynamics", McGraw-Hill Inc.,1967.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E. Egyptian Company
Fee's: L.E. 600 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: Earthquake Design

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Introduction to earthquakes and earthquake engineering.
- Earthquake loading and analysis for earthquake loadings.
- Design of foundations and earth structures for earthquakes.
- Design and detailing of reinforced concrete structures for earthquake loadings.
- Design and detailing of steel structures for earthquake loadings.
- Repair and strengthening of structures subjected to earthquake loadings.

Course Objectives:

The objective of this course is to introduce engineers to earthquake engineering, in addition to the design and detailing of different types of structures subjected to earthquake loadings according to the current codes and practices

Learning outcomes:

Knowledge of earthquake design and structures subjected to earthquake loadings.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

- Fresh engineering graduates.

This form should be completed by the accountable who conduct courses inside or outside A.R.E

- Design engineers in consulting offices and firms.
- Technical office engineers in construction companies.

Course References:

- CHOPRA, ANIL K., " Dynamics of Structures ", Theory and Applications to Earthquake Engineering, Prentice-Hall, Englewood Cliffs, USA.
- PAZ, M." Structural Dynamics: Theory and Computation", 2 nd Edition, Van Nastrand Reinhold Company, New York, 1985.
- LIN, Y."Probabilistic Theory of Structural Dynamics", McGraw-Hill Inc.,1967.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3
No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E. Egyptian Company
Fee's: L.E. 600 \$ 200 Other: 2000 \$
 For Egyptian For non Egyptian 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:

Tall Buildings

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- History of tall buildings.
- Difference between ordinary and tall buildings.
- Types of tall buildings.
- Lateral loads on tall buildings.
- Types of lateral load resisting elements in tall building.
- Gravity load resisting elements in tall buildings.
- Preliminary analysis and design lateral load resisting elements.
- Detailed analysis of lateral load resisting elements.
- Designing and detailing lateral load resisting elements.
- Foundations for tall buildings

Course Objectives:

This course aims at providing design engineers with the knowledge needed to design tall buildings, in lieu of the proposed increase of the maximum allowable height of buildings in some areas in Egypt.

Learning outcomes:

Ability of designing tall buildings

Course includes:

Theoretical

Tutorial

Laboratory

Workshop

Site Visit

Course Prerequisites:

None

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Who should attend:

- Fresh engineering graduates.
- Design engineers in consulting offices and firms.
- Technical office engineers in construction companies.

Course References:

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E.
Egyptian Company
Fee's: L.E. 600 \$ 200 Other: 2000 \$
For Egyptian For non Egyptian 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: Reliability in Civil Engineering

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Reliability definition .
- Probability tipsy applications .
- Medalling uncertainty .
- Central limit theorem and other theories .
- Defining uncertainty parameters from actual data .
- Finding confidence in estimates based on uncertainty conditions.

Course Objectives:

To introduce the students to how to consider uncertainty in the different civil engineering problems applications and how to model such uncertainty and how to approach problems with missing data or those of indeterminist trend

Learning outcomes:

Understanding and applying reliability in civil engineering

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

This form should be completed by the accountable who conduct courses inside or outside A.R.E

- B.SC. Civil engineering .
- B.SC. Construction Engineering

Course References:

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

Qualifications of Participants:

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 type="checkbox"/> Data show | <input type="checkbox"/> PC | <input type="checkbox"/> Manual | <input type="checkbox"/> Handouts |
| <input type="checkbox"/> Books | <input type="checkbox"/> Handouts | <input 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

- Registration:** AAST Admission Registration Online Other: -----
- Sponsor:** Individual Funded By: 8000 L.E.
Egyptian Company
- Fee's:** L.E. 600 \$ 200 Other: 2000 \$
For Egyptian For non Egyptian 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: Elements Health Monitoring of Structures

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Health Monitoring reasons of study and theory .
- Samples of Applications.
- Introduction to system identification .
- Introduction to Structural Control.
- Examples of applications.
- Methods of approaching problems .

Course Objectives:

To introduce the students to the applications of health monitoring and the potential behind its requirement for study and being applied.

Learning outcomes:

Understanding health monitoring concepts and the importance of its application

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

- Advanced Mathematical Knowledge
- Advanced design experience or (Introduction to structural dynamics).
- B.SC. Structural Engineers .

This form should be completed by the accountable who conduct courses inside or outside A.R.E



Training Course Information Form

Course Information

Course Name: Design for Cold-Formed Steel Structures

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Become familiar with steel grades applicable for cold-formed steel members.
- Develop an understanding of the behavior of cold-formed steel members and connections.
- Learn the appropriate applications for cold-formed steel members and connections.
- Be able to develop more optimum designs using cold-formed steel.
- Develop an understanding of industry practices, standards, and code requirements.
- Gain an understanding of differences between hot-rolled and cold-formed steel design for members, connections and assemblies.

Course Objectives:

Cold-formed steel products have enjoyed significant growth in recent years. They may be utilized in various forms on commercial, industrial and residential construction projects today. Their strength, light weight, versatility, non-combustibility, and ease of production have encouraged architects, engineers, and contractors to use cold-formed steel products which can improve structural function and building performance, and provide aesthetic appeal at lower cost.

The concepts of cold-formed steel design are typically not taught in engineering schools, therefore, engineers are required to self-teach these concepts. This course will provide an understanding of the behavior and design principles of cold-formed steel members and connections. These principles will be applicable to many aspects of cold-formed steel design to included tension members, columns, beams, and bolted, and welded connections.



Arab Academy for Science, Technology and Maritime Transport

Training Course Information Form

Course Information

Course Name: Structural Design of Building and Industrial Facilities for Blast Loads and Accident Explosions

Institute/Centre: Department: Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Learn how to complete loads generated by bomb blasts and accidental chemical explosions.
- Learn how to determine structural response to blast and explosion loads.
- Understand structural material behavior under intense short-duration dynamic loads.
- Design steel and concrete members subjected to bomb and chemical explosions.
- Receive a completely worked out design example of a steel and concrete building, including step by step calculations.

Course Objectives:

Threat of Bomb blasts at key government, business, industrial and large residential buildings have created a need to design these buildings to withstand intense dynamic loads generated by bomb blast. A similar problem is accident chemical explosions in petrochemical and other industrial facilities. Load computation, structural response analysis and structural design for both these problems are similar. These two topics are covered together in this course. This course will teach how to design steel and concrete structures to withstand bomb blasts and accidental chemical explosions.

Learning outcomes:

- Learn how to complete loads generated by bomb blasts and accidental chemical explosions.
- Learn how to determine structural response to blast and explosion loads.
- Understand structural material behavior under intense short-duration dynamic loads.
- Design steel and concrete members subjected to bomb and chemical explosions.
- Receive a completely worked out design example of a steel and concrete building, including step by step calculations.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course Prerequisites:
None

Who should attend:
Structural engineer

Course References:

- CHOPRA, ANIL K., " Dynamics of Structures ", Theory and Applications to Earthquake Engineering, Prentice-Hall, Englewood Cliffs, USA.
- PAZ, M." Structural Dynamics: Theory and Computation", 2 nd Edition, Van Nastrand Reinhold Company, New York, 1985.
- LIN, Y."Probabilistic Theory of Structural Dynamics", McGraw-Hill Inc.,1967.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
- Books Handouts 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: 8000 L.E. Egyptian Company
- Fee's:** L.E. 600 \$ 200 Other: 2000 \$
- For Egyptian For non Egyptian 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: Environment Impact Assessment for Projects

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Introduction to environment and pollution
- International environmental regulations
- Local environmental legislations
- History & main contents of EIA report
- Application of EIA

Course Objectives:

The objective of this courses is to develop an appreciation to local and international environmental legislations, and to develop on understanding to the content and the application of Environmental Impact Assessment report.

Learning outcomes:

Be aware of environmental impact assessment concepts and importance.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

Environment and Pollution

Who should attend:

- Engineers & Architects
- Researchers
- Environment Responsibles

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course References:

- M.L. Davis and Cornwell, "Introduction to environmental Engineering", PWS Publishers Boston, 1985.
- H.S. Peavy, D.R. Rowe and G. Tchobanoglous, "Environmental Engineering", Mc Graw-Hill Co., New York, 1987.
- Schmidtc,"Air pollution assessment and control", Wiley,1998
- Cheremisinoff, Paul N., "Ecological issues and environmental impact assessment", Gulf Publishing Company, 1997.
- Books available at the AASTMT library

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E. Egyptian Company

Fee's: L.E. 600 \$ 200 Other: 2000 \$
 For Egyptian For non Egyptian 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:

Environment and Pollution

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- Main concept of sustainable development
- Water quality management & waste water treatment
- Air pollution : sources, effects & control
- Solid & hazardous waste management
- Noise pollution sources, effects & control

Course Objectives:

The objective of this course is to develop an appreciation to the concept of environment and eco-systems; and to develop an understanding to the main sources of pollution, their effects, and methods to control pollutants.

Learning outcomes:

Knowledge with the main sources of pollution, the water quality management and wastewater treatment and disposal systems.

Course includes:

Theoretical

Tutorial

Laboratory

Workshop

Site Visit

Course Prerequisites:

None

Who should attend:

- Engineers & Architects
- Researchers
- Environment Responsibles

Course References:

- M.L. Davis and Cornwell, "Introduction to environmental Engineering", PWS Publishers Boston, 1985.
- H.S. Peavy, D.R. Rowe and G. Tchobanoglous, "Environmental Engineering", Mc Graw-Hill Co., New York, 1987.
- Metcalf and Eddy, Inc., "Waste water Engineering, Collection and Pumping of Waste water", Mc Graw-Hill Co., New York, 1981.
- Bradshaw V. , "Building Control Systems" ,John Wiley, New York, 1995
- MERRITT F.S., RICKETTS J.T., "Building design & Construction Hand Book" Mc Graw Hill, Inc, New York, 1994
- Books available at the AASTMT library

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

- White Board V. Projector Data show PC Manual Handouts
Books Handouts 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: 8000 L.E. Egyptian Company
Fee's: L.E. 600 \$ 200 Other: 2000 \$ Non Egyptian Company
Documents required: Registration form ID/Passport copy Photo



Training Course Information Form

Course Information

Course Name:

Port development and Planning

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- Introduction
- Wave theory, Wave diffraction inside Ports
- Port planning
- Breakwaters
- Navigations channels and Ports entrance
- Turning basins
- Dock structures (Quays, Jetties and Dolphins)
- Berths Quay walls
- Fender systems
- On shore marine terminals facilities
- Dredging and reclamation
- Guidelines for ports developments
- Ports mitigation measures and monitoring plans
- Beach nourishment
- Integrated Coastal Zone Management (ICZM)
- Cases of study

Course Objectives:

- Ensure a solid foundation in the keys aspect of port development and planning
- Offer an outstanding opportunity to gain detailed knowledge of both the contractual framework and practical application of port development and planning
- Present an invaluable opportunity to develop and update existing knowledge.

Learning outcomes:

Detailed knowledge of port development and planning concepts.

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course Prerequisites:

None

Who should attend:

- Coastal and marine structures companies.
- Oil and Liquefied Natural Gas (L.N.G) companies.
- Maritime Military.

Course References:

- J.W. Kamphuis, "Introduction to Coastal Engineering and Management", World Scientific Publishing Co., NJ, USA, 2001.
- "Coastal Defense-ICE design and practice guide", A. Brampton, Thomas-Telford, London, 2002.
- "Hydraulics in Civil and Environmental Engineering", A. Chadwick and A.J. Morfett, Spon Press, London, New York, 2002.
- "Coastal Engineering-processes, theory and design practice", D. Reeve, A. Chadwick and C. Fleming, Spon Press, London and New York, 2004.
- "Port Engineering", Per Bruun, Gulf Publishing Co., Houston, USA, 1981.
- "Construction Risk in Coastal Engineering", ed. J. Simm and I. Cruickshank, Thomas Telford, U.K., 1998.
- "Coastal Engineering Manual (US Army): <http://chl. erdc. usace. Army. Mil/>, formerly: "Shore Protection Manual", U.S. Army Corps of Engineering, Coastal Engineering Research Center, Vicksburg, USA, 1984.
- "Oceanographical Engineering", R.L. Wiegel, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, USA, 1964.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E. Egyptian Company

Fee's: L.E. 600 \$ 200 Other: 2000 \$
 For Egyptian For non Egyptian Non Egyptian Company

Documents required: Registration form ID/Passport copy Photo

This form should be completed by the accountable who conduct courses inside or outside A.R.E



Arab Academy for Science, Technology and Maritime Transport

Training Course Information Form

Course Information

Course Name:

Design of Port Structures

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- Port Planning; definition and strategic planning
- Items of port planning; breakwaters, navigation channel, port entrance, turning basin, berths and on-shore facilities.
- Breakwaters; definition and types (vertical, rubble mound, composite breakwater, reef breakwater detached breakwater and floating breakwater).
- Breakwater failures types.
- Breakwater design methods.
- Dock structures (Quays, Jetties and Dolphins)
- Design of gravity quay wall.
- Design of sheet pile wall.
- Fender systems; wood fenders, rubber fenders and foam filled fenders
- Dredging and reclamation; definition and Equipments.

Course Objectives:

- Offered an outstanding opportunity to gain detailed knowledge of both the contractual framework and practical application of the design of port structures.
- Ensure a solid foundation in these keys aspect of design of port structures.
- Present an invaluable opportunity to develop and update existing knowledge.

Learning outcomes:

Complete knowledge about port structure design and updating existing understanding

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course Prerequisites:

None

Who should attend:

- Coastal and marine structures companies.
- Oil and Liquefied Natural Gas (L.N.G) companies.
- Maritime Military.

Course References:

- J.W. Kamphuis, "Introduction to Coastal Engineering and Management", World Scientific Publishing Co., NJ, USA, 2001.
- "Coastal Defense-ICE design and practice guide", A. Brampton, Thomas-Telford, London, 2002.
- Hydraulics in Civil and Environmental Engineering", A. Chadwick and A.J. Morfett, Spon Press, London, New York, 2002.
- "Coastal Engineering-processes, theory and design practice", D. Reeve, A. Chadwick and C. Fleming, Spon Press, London and New York, 2004.
- "Port Engineering", Per Bruun, Gulf Publishing Co., Houston, USA, 1981.
- "Construction Risk in Coastal Engineering", ed. J. Simm and I. Cruickshank, Thomas Telford, U.K., 1998.
- "Coastal Engineering Manual (US Army): <http://chl. erdc. usace. Army. Mil/>, formerly: "Shore Protection Manual", U.S. Army Corps of Engineering, Coastal Engineering Research Center, Vicksburg, USA, 1984.
- "Oceanographical Engineering", R.L. Wiegel, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, USA, 1964.

No. of Participants/course: 5-10 10-15 15-20 Other: -----**Qualifications of Participants:****No. of Lecturer:** 1 2 3**No. of Assistance:** 1 2 3**Course Facilities** White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E. Egyptian Company**Fee's:** L.E. 600 \$ 200 Other: 2000 \$
 For Egyptian For non Egyptian Non Egyptian Company**Documents required:** Registration form ID/Passport copy Photo

This form should be completed by the accountable who conduct courses inside or outside A.R.E



Arab Academy for Science, Technology and Maritime Transport

Training Course Information Form

Course Information

Course Name: Integrated Coastal Zone Management

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- An introduction to coastal zones.
- Coastal processes.
- Integrated Coastal Zone Management (ICZM); definitions, objectives, urgencies and benefits.
- Approach of ICZM; integration and arrangements.
- Practice of ICZM; stages, initiation, planning, implementation, monitoring and evaluation.
- Methods, tools and techniques of ICZM
 - Classes of useful methods, tools and techniques
 - Environmental Impact assessment (EIA) techniques
 - Policy tools
- General overview of ICZM.
- Case of study

Course Objectives:

- Offer an outstanding opportunity to gain detailed knowledge of concept of the Integrated Coastal Zone Management.
- Ensure a solid foundation in these keys aspect of Integrated Coastal Zone Management.
- Present an invaluable opportunity to develop and update existing knowledge

Learning outcomes:

Complete knowledge of integrated coastal zone management

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course Prerequisites:

None

Who should attend:

- Coastal and marine structures companies.
- Oil and Liquefied Natural Gas (L.N.G) companies.
- Maritime Military.

Course References:

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E.
Egyptian Company

Fee's: L.E. 600 \$ 200 Other: 2000 \$
For Egyptian For non Egyptian 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:

Traffic Engineering

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- Introduction to traffic engineering
- Important definitions
- Basics of traffic engineering

Course Objectives:

Simple Presentation for the Principles of Traffic Engineering

Learning outcomes:

Understanding traffic engineering principles

Course includes:

Theoretical

Tutorial

Laboratory

Workshop

Site Visit

Course Prerequisites:

None

Who should attend:

- Police Officer in traffic Division
- Junior Engineers in Municipalities



Arab Academy for Science, Technology and Maritime Transport

Training Course Information Form

Course Information

Course Name: GIS for Construction Engineering

Institute/Centre: **Department:** Construction & Building Engineering

Type: Program Course Workshop

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

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

Course Venue: AASTMT

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

Course Description

Course Outlines:

- Introduction to Geographic Information Systems
- Principles of GIS
- Application of GIS for various branches of construction engineering.

Course Objectives:

Understanding GIS
How to apply it in construction engineering

Learning outcomes:

Ability of applying the GIS technology in construction engineering

Course includes: Theoretical Tutorial Laboratory Workshop Site Visit

Course Prerequisites:

None

Who should attend:

- Design civil engineers.
- Civil and Construction Engineering Department students

This form should be completed by the accountable who conduct courses inside or outside A.R.E

Course References:

- Star, J. and Estes, J. (1990) Geographic information systems: An introduction. Printice-Hall, Englewood Cliffs, N.J.
- DeMers M. N. (1997) Fundamentals of Geographic information systems. John Wiley & Sons, New York.
- Thill J.C. (ed.) (2000) Geographic Information Systems in Transportation Research. Oxford, UK: Elsevier Science Ltd.
- Miller H.J. and Shaw S.L. (2001) Geographic Information Systems for Transportation: Principles and Applications. New York: Oxford University Press.
- Lo C.P. and Yeung A.K.W. (2002) Concepts and Techniques of Geographic Information Systems. Upper Saddle River, NJ: Prentice Hall.

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

White Board V. Projector Data show PC Manual Handouts
 Books Handouts 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: 8000 L.E.
Egyptian Company
Fee's: L.E. 600 \$ 200 Other: 2000 \$
For Egyptian For non Egyptian 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:

Surveying and Practical Use of Total Station

Institute/Centre:

Department:

Construction & Building
Engineering

Type:

Program

Course

Workshop

Course Duration:

5 days

3 days

1 days

Other: -----

Course Conducted:

Local

International

Indicate: -----

Course Venue:

AASTMT

Course Language:

English

Arabic

Both

Other: -----

Course Description

Course Outlines:

- Description of total station
- Basic application of total station
- Civil application of total station

Course Objectives:

How to be familiar with instrument of total station

Application of total station for construction engineering

Learning outcomes:

Ability of using and applying the total station instrument in construction engineering

Course includes:

Theoretical

Tutorial

Laboratory

Workshop

Site Visit

Course Prerequisites:

None

Who should attend:

- How to be familiar with instrument of total station
- Application of total station for construction engineering

Course References:

- William Irvine , FRICS ; “Surveying for Construction “ ; McGraw-Hill , London , 1974
- Bannister & S. Raymond ; “ Surveying “ ; Pitman ; London , 1993

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

Qualifications of Participants:

No. of Lecturer: 1 2 3

No. of Assistance: 1 2 3

Course Facilities

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