

T raining Catalogue

2016/2017

Your Way to be more Professional

Electric Power Systems **EPS**
 **Engineering Company**



Dears,

Allow me to welcome you on a tour in **EPS** business. Since its establishment in 1982 **EPS** as a specialized consulting company in power systems engineering was keen to serve its clients using the most up-to-date technologies and science.

Our main objective is to serve public and private sector in and outside Egypt in planning, design, supervision and management of power projects. Through long successful implemented projects **EPS** gained high reputation locally and abroad. Our vision is to extend our services to all Middle East countries, African countries and compete in the world's competitive market - we are confident that we can do it.

Recognizing the importance of human resource capacity, **EPS** has decided to strengthen its Training Services by introducing new modern facilities, training fields and employing specialized trainers. No doubt, training will raise the technical capacity of the trainees, strengthen his/her profession, widen job opportunities and rank him/her in better position.

I hereby invite you to review **EPS** training opportunities, looking forward to have you with us soon.

Eng. Hosni El Kholy

EPS Chairman and CEO

ELECTRIC POWER SYSTEMS ENGINEERING Co. (EPS) is a joint stock Egyptian Company established in October 1982 under the laws of the General Authority for Investments and Free Zones.

The company is specialized in carrying out engineering and construction management services in the field of Electric Power Systems.

Since its establishment, EPS has conducted services for about 3500 engineering projects in the fields of electric power generation, transmission and distribution in Egypt, Algeria, Libya, Sudan, Ethiopia, Burundi, Saudi Arabia, United Arab Emirates, Oman and Yemen.



The services covered include power system planning, techno-economic feasibility studies, power system design, and preparation of tender documents, bid evaluation, contracting support , and project management. **EPS** has developed extensive packages of software applications oriented to automate managerial and financial processes, as well as, to support management decision-making.



Furthermore **EPS** participate in international consultancy and contracting services for various Arab & African countries. During the last 30 years, **EPS** has succeeded to increase its scope of services extensively, and successfully, undertaken to cover a wide range of activities for more than 3500 projects.

EPS is a recognized leader in power systems analysis and network expansion planning, sub-stations, transmission lines, distribution networks, and SCADA projects. One of the main focus of the Company is to deliver quality and cost effective services that satisfy the customers. To achieve customer satisfaction, **EPS** is committed to provide quality and cost effective engineering services in the field of electric power systems , that fully meet the needs and expectations of every customer through expertise and standard of excellence. The company is also dedicated to use information technology to develop systems driven by customer needs.



EPS instructors are specialized in delivering an engaging classroom experience that prepares students to return to work and immediately apply what they've learned. How do they do this?

All instructors have achieved a successful history in designing, executing, and managing many electrical power systems projects. They have practical teaching skills, including preparation, presentation, communication, facilitation, and evaluation, in classroom environments.

The **EPS** Technical Programs recognize expertise in the use of **EPS** products and technology. You can be confident that your instructor has the experience, technical know-how, and real-world application knowledge to answer your questions and provide the most up-to-date information about best practices for the taught training programs.



"Very helpful program, and the instructor was very knowledgeable. He made the subject interesting and kept the class's attention."

—Noura Dahroug



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Our team of industry experts is the ideal people to deliver technical and electrical training, covering the design, construction, operation and maintenance of power systems.

Their in-depth knowledge means that our training events are delivered to the highest of standards.

So much so, that our programs are incredibly popular with our colleagues and increasingly in demand from external organizations.



- * Class-Room Training
- * On Job Training
- * Laboratory
- * Training
- * Applications

- ☺ Projects served till the end of 2009/10 = 60 Projects
- ☺ Number of Trainees till the end of 2009/10=700 Trainees.
- ☺ Among them 150 Trainees from the General Electricity Company of Libya, 48 from Public Electricity Corporation of Yemen, 42 from Southern Sudan Electricity Corporation (SSEC) and 360 from Egyptian Electricity and Energy Sectors.

Who should attend:

Project managers, Construction managers, Site engineers, Design engineers, IT manager, Business analysts and others.

**09 Power Planning Studies****→ Voltage and Reactive Power Planning in Power System**

(Code No: B1-102)

Course Contents:

- ☺ Power system Structure
- ☺ Types of feeding sources
- ☺ Flow chart for study and planning
- ☺ Reactive Power resources
- ☺ Voltage coordination
- ☺ Power capacitor
- ☺ Power factor improvement
- ☺ Applications

→ Real-time Operations and Reliability Readiness

(Code No: OS-108)

Course Contents:

- ☺ Power Transmission and Distribution in the 21st Century:
The Utility Perspective
- ☺ Overview of Power Networks
- ☺ Electric Transmission Lines
- ☺ Reactive Power and Voltage Control Issues in Electric Power Systems
- ☺ Power System Oscillations
- ☺ Overview of Power System Reliability Assessment Techniques
- ☺ Power System Stability: New Opportunities for Control
- ☺ Analysis of Blackout Development Mechanisms in Electric Power Systems
- ☺ Electric System Restoration
- ☺ Lessons Learned from Recent Major Outages
August 2003 Blackout - Restoration
- ☺ Blackout in Hainan Island Power System: Causes and Restoration Procedure
- ☺ Course Wrap-up and Discussions

09 Power Planning Studies

→ **Advanced Enterprise Asset Management****Course Contents:**

(Code No: OS-201)

- ☉ Different perspective of asset management
- ☉ IEC standards for asset management
- ☉ Common information model and information exchange
- ☉ Role of asset management for equipment life extension planning
- ☉ Identifying critical assets and risk assessment.
- ☉ Electric utilities and asset management
- ☉ Geographical information system (GIS) and asset management
- ☉ Asset management for smart grid
- ☉ Audit of asset management for electric utility

10 Electrical Networks Design

→ **Electrical Network Study & Planning and Network Losses Reduction**

(Code No: B1-104)

Course Contents:

- ☉ Calibration of Energy Meters (CEM)
- ☉ Program Input Data Preparation for Electrical Network
- ☉ Electrical Load Forecasting
- ☉ Power System Simulation (PSS/E) and Optional Power Flow (OPF) program applications
- ☉ Network steady state and Transient stability study
- ☉ Electrical power factor improvement for different network voltage with using the application of the computer program (PF7)
- ☉ Network Energy Losses Calculation
- ☉ Network Energy Losses Reduction

10 Electrical Networks Design

Electric Power Distribution System

(Code No: B1-109)

Course Contents:

- ☺ Components of distribution system
- ☺ Graphic symbols used in distribution design
- ☺ Load characteristics
- ☺ Distribution transformers.
- ☺ Sub-transmission lines and distribution substations
- ☺ System grounding
- ☺ Voltage drop and power-losses
- ☺ Rating and derating
- ☺ Distribution system protection

Smart Grid Technologies, Markets, Components and Trends

(Code No: OS-202)

Course Contents:

This proposed training course on Smart Grid Energy Technologies presents an in-depth the basics of smart grid and its importance for the deregulated electricity. The electric grid is over a hundred years old, has changed little in the way it operates since its inception, and will not be able to support future electric demand without substantial new and costly infrastructure. However, technologies exist that can improve efficiencies and moderate electric usage which will largely offset much of the need for new power plants, transmission lines, and other electric grid components. An "intelligent" or "smart" grid will provide improved service reliability and more stable electric rates at a lower cost than simply building all the infrastructure that would be required to meet future demand for electricity using the current electric utility business model.

10 Electrical Networks Design

→ Electric System Loss

(Code No: B1-110)

Course Contents:

- ☺ Definition and principle
- ☺ Electric losses:
 - * Power losses
 - * Energy losses
- ☺ Losses of transformers
- ☺ Losses of distribution system
- ☺ Optimizing distribution losses
- ☺ Losses and harmonics
- ☺ Evaluation of losses.
- ☺ Standards.
- ☺ A major components of non-technical losses.
- ☺ Measure for reducing technical losses.
- ☺ Application on PC.

→ HVDC Transmission and Control

(Code No: B1-110)

Course Contents:

- ☺ Definition and principle
- ☺ Electric losses:
 - * Power losses
 - * Energy losses
- ☺ Losses of transformers
- ☺ Losses of distribution system
- ☺ Optimizing distribution losses
- ☺ Losses and harmonics
- ☺ Evaluation of losses.
- ☺ Standards.
- ☺ A major components of non-technical losses.
- ☺ Measure for reducing technical losses.
- ☺ Application on PC.

10 Electrical Networks Design

Electrical Switchgear Selection and Operation

(Code No: OS - 100)

Course Contents:

- ☉ Electrical Safety Codes and Standards
- ☉ Effects of Electric Current on a Human Body
- ☉ Understand the Risks around Energized Equipment
- ☉ Power System Hazards
 - * Case studies
- ☉ Power System Faults
- ☉ Major Causes: Human or Operator Error, Equipment Breakdown
- ☉ Arcing Flash/Blast Review with Safety Suggestions
 - * Case studies
- ☉ Switchgear
- ☉ Circuit-switching devices
- ☉ Power System Protection
- ☉ Switchgear Specifications
 - * Case studies
- ☉ Electrical Commissioning
 - * Case studies and Tutorials

13 Power Systems Protection

New Technologies for Electrical Networks Protection

(Code No: B1-105)

Course Contents:

- ☉ Review on Electrical Power System
- ☉ Introduction and Basics
- ☉ IEEE Standard device numbers
- ☉ Control circuit schematics
- ☉ Elementary tripping circuit
- ☉ Philosophy of Protective Relaying
- ☉ Over-current Protection
- ☉ Distribution & Transmission system protections
- ☉ Protection of Power Transformer
- ☉ Protection of Buses
- ☉ Out of step conditions, load shedding, and reclosing
- ☉ Backup Protection
- ☉ Grounding system

13 Power Systems Protection

→ Power Systems Protection and Analysis

(Code No: OS-104)

Course Contents:

- ☉ Power System Overview
- ☉ Basics of Power System Protection
- ☉ Types of Faults and Short Circuit Current Calculations
- ☉ System Earthing and Earth Fault Current
- ☉ Fuses and Circuit Breakers
- ☉ Instrument Transformers
- ☉ Relays and Auxiliary Power Equipment
- ☉ Protection Grading and Relay Coordination
- ☉ Protection of Feeders and Lines
- ☉ Protection of Transformers

→ Power Systems Grounding

(Code No: OS-105)

Course Contents:

- ☉ Effects of Current on a Human Body
- ☉ Standards for Grounding
- ☉ Basics of System Grounding
- ☉ NEC Requirements
- ☉ Grounding Systems
- ☉ Grounding System Testing
- ☉ Measurement of an Electrode Ground Resistance
- ☉ Personal Protective Grounding
- ☉ Lightning and Protection
- ☉ Cathodic Protection

13 Power Systems Protection

Insulation Coordination for Power Systems

(Code No: OS-103)

Course Contents:

- ☉ Insulators for Overhead Lines
- ☉ Pollution Measurement on Insulators
- ☉ Washing and Cleaning of Insulators
- ☉ High Voltage Transient Analysis
- ☉ Overvoltages in Power Systems
- ☉ Temporary Overvoltages
- ☉ Lightning Phenomena
- ☉ A Hybrid Lightning Strike Protection System
- ☉ Protection Feature of High Voltage Transmission Line
- ☉ Condition Monitoring of Lightning Arresters
- ☉ Grounding of Electrical Power Systems
- ☉ Insulation Co-ordination
- ☉ Characteristics of lightning arrestors and separation limits

15 Power Quality

Power Quality and Energy Saving

(Code No: B1-106)

Course Contents:

- ☉ Power Quality Definition and Objective of Power Quality Measurements
- ☉ Power Quality Problems
- ☉ Solutions for Improving P.Q
- ☉ Electrical Systems Grouping for Improving Power Quality
- ☉ Economical Feasibility Study for Improving Power Quality
- ☉ Electrical Supply System Reliability in Egypt compared to European Countries

15 Power Quality

→ Electric Power Quality

(Code No: B1-111)

Course Contents:

- ☺ Types of power quality disturbances
- ☺ Load profiles
- ☺ Voltage sags and interruptions:
 - * Sources, effects, mitigations
- ☺ Voltage swells:
 - * Sources, effects, mitigations
- ☺ Harmonic Distortion:
 - * Harmonics indices
 - * Harmonic sources
 - * Effect of harmonics
 - * Inter harmonics
 - * Solutions: derating, passive and active approach
- ☺ Cost of power quality
- ☺ Site surveys and case studies
- ☺ Standards.
- ☺ Electric power distribution reliability indices:
 - * Applications
 - * Survey on electric power distribution reliability indices

→ Power Capacitors and Power Factor Improvement

(Code No: B1-113)

Course Contents:

- ☺ Definition and principal.
- ☺ Power factor fundamentals:
 - * LV capacitor
 - * HV capacitor
- ☺ Power capacitors
- ☺ Capacitor location
- ☺ Power factor improvement of transformers
- ☺ Capacitors and auxiliaries
- ☺ Power factor and harmonics
- ☺ Case studies

15 Power Quality**→ Reactive Power Management and Power Factor Correction**

(Code No: OS-107)

Course Contents:

- ☉ Power Factor Concepts
- ☉ Capacitor Specifications
- ☉ Power Factor Improvement
- ☉ Location of Shunt Capacitors
- ☉ Capacitors for Miscellaneous Applications
- ☉ Reducing Power Factor Cost
- ☉ Reactive Power Compensations
- ☉ Protection of Shunt Capacitors
- ☉ Overcurrent Protection
- ☉ Power Factor Equipment and testing
- ☉ Maintenance and Troubleshooting
- ☉ Harmonic Filtering and Power Factor Correction

→ Power Quality and Harmonics

(Code No: OS-106)

Course Contents:

- ☉ Introduction to power quality problems
- ☉ Effects of Disturbances on Equipment and Processes
- ☉ Industry Commitment to Power Quality
- ☉ IEEE Standards and Recommendations
- ☉ Harmonics
- ☉ Harmonic Sources
- ☉ Harmonic Analysis
- ☉ Effects of Harmonic Distortion
- ☉ Harmonic Monitoring
- ☉ Harmonic Elimination
- ☉ Calculation of Harmonic Voltages and Currents
- ☉ Harmonics Problems
- ☉ Harmonic Limit Compliance Evaluations Using IEEE 519-1992
- ☉ Grounding
- ☉ Mitigation Techniques
- ☉ K-Factor Transformers
- ☉ Power Line Conditioners

18 Control and Communications

→ Control and Communications

(Code No: B1-101)

Course Contents:

- ☺ Introduction
- ☺ Control Centers Hierarchy
- ☺ Meaning of SCADA
- ☺ Task of Management System
- ☺ Energy System Applications
- ☺ Distribution System Applications
- ☺ SCADA System Components
- ☺ Modern Control Center Architecture
- ☺ SCADA System Integration
- ☺ Communications Standards and Protocols
- ☺ Communications Hardware
- ☺ Data Communication System
- ☺ Voice Communication
- ☺ Communication Channel Configuration
- ☺ Communication media
- ☺ Introduction for (SCS)

→ Demand Side Management Energy Conservation Opportunities

(Code No: B1-108)

Course Contents:

- ☺ Introduction to DSM
- ☺ Survey instrumentation
- ☺ Understanding energy bills
- ☺ Energy survey
- ☺ Lighting
- ☺ Power factor improvement and Harmonic
- ☺ Maintenance
- ☺ Insulation
- ☺ Processing and equipment
- ☺ Case studies

18 Control and Communications

→ Economical Operation of Distribution Network

(Code No: B1-115)

Course Contents:

- ☺ Overhead power lines:
 - * Selection of: line voltage, conductors, insulators and supports
 - * Line costs
- ☺ Power Cables:
 - * Types of cables
 - * Cost considerations
 - * Optimum cable size
 - * Economic selection of cables
- ☺ Earthing:
 - * Methods of earthing
 - * Earthing on LV
 - * Performance of earth electrodes
- ☺ Transformers:
 - * Single-phase transformer
 - * Three-phases transformer
 - * Transformer loading and economical evaluation
- ☺ Planning of low-voltage installations

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Civil Structure analysis

Structure Analysis and Design

(Code No: N4-103)

Course Contents:

- Introduction to STAAD.Pro V8i
- Model Generation Using the Pro-processor
- Building the Structure Geometry, Visualization and Structure Integrity, Checking tools
- Modeling By Using Structure Wizard
- Modeling Beams, Columns, Slabs, Mat Foundation, Concrete and Steel Tanks
- Create Parametric Models for Auto Meshing and Slab Openings
- Assigning Properties, Members and Element Orientation, Material, connections information
- Loading types, Load Cases and Automatic Load Combinations
- Member Specification, Releases, Tension Only, Compression Only and Member Cables
- Troubleshooting Modeling Problems
- Viewing and Validation the Analysis Results, Bending Moment
- Shear forces, Normal Forces, Displacement, Supports Reaction, Plate Stresses, and Soil Pressure
- Zero Stiffness Condition and Instabilities
- Load Generation for Wind Loads
- Load Generation for Vehicle loads
- Seismic Analysis Using Static Equivalent Method Using UBC and IBC
- Time History Analysis
- Response Spectrum Analysis
- Structure Dynamics, Mode Shapes
- Creating Reports for the Analysis Results
- Design of Steel Structure, Optimization, Material Take off
- Design of Concrete Beams, Columns, Slabs and Foundation
- Physical Beam Design of Steel Structure and Connections and Detailed Calculation Sheet
- Physical Beams, Columns of Concrete Structures and Detailed Calculation Sheet



21 Overhead Transmission Lines & Cables

→ Design Concepts for Overhead Transmission Lines

(Code No: N2-101)

Course Contents:

- ☺ Introduction of steps of OHTL design
- ☺ Overview of PLS-CADD importance in OHTL design
- ☺ Terrain modeling and survey data
- ☺ Design requirements for conductors, insulators, towers, and earth wires.
- ☺ Construction drawings and documents
- ☺ Attendance certificate



Note: This is a preliminary course covers only the framework of OHTL design and not intended for experienced design engineers

→ Power Distribution Cables

(Code No: B1-114)

Course Contents:

- ☺ Power Cables:
 - * L.V power cable
 - * M.V power cable
 - * H.V power cable
- ☺ Technical Data:
 - * Voltage
 - * Cable parameters
- ☺ Selection criteria of cables:
 - * Rating
 - * Short circuit
 - * Voltage drop and power loss
- ☺ Cables Testing
- ☺ Very low Frequency AC technology
- ☺ Hazard, safety precautions

22 Lighting

Lighting Design and Application

(Code No: B1-112)

Course Contents:

- ☉ Types of lamps:
 - * Bulb lamps
 - * Fluorescent lamps
 - * Compact Fluorescent lamps
 - * Discharge lamps
- ☉ Fixture and ballasts
- ☉ Lighting controls:
 - * Automated on/off controls
 - * Occupancy controls
- ☉ Lighting Economics:
 - * Capital cost
 - * Operating cost
- ☉ Lighting design considerations
- ☉ Lighting energy saving considerations
- ☉ Lighting audits
- ☉ Case studies

22 Substations

Circuit Breaker Construction, Technical state assignment Testing and operational issues

(Code No: B1-116)

Course Contents:

- ☉ Introduction
- ☉ Definitions and Jobs of Switch Gear Parts
- ☉ Types, Specification and Construction of Circuit Breakers
- ☉ Circuit Interruption
- ☉ Automatic Operation Consideration of Circuit Breakers
- ☉ Relays Types and Transient Currents
- ☉ Rated Characteristics of Medium Voltage Circuit Breaker
- ☉ Circuit Breaker Various Tests
- ☉ Circuit Breaker Test Equipment
- ☉ SF6 Moistures Content at Circuit Breaker
- ☉ Maintenance consideration of Circuit Breakers
- ☉ Case Studies

Electrical Accident Investigation and System Safety

(Code No: OS-101)

Course Contents:

- ☺ The Law and Regulations Applying to Electrical Work
- ☺ Electrical Safety Codes and Standards
- ☺ Types of Standards
- ☺ Electrical Hazards from Power System Equipments
- ☺ Effects of Electric Current on a Human Body
- ☺ Power System Faults
- ☺ Facts and Figures
- ☺ Personal Protective Equipment
- ☺ Temporary Grounding
- ☺ Hazards of Isolated Equipment
- ☺ Potential Indicating Devices
- ☺ Isolation and Switching Procedures
- ☺ Lockout and Tagout Procedures
- ☺ Understand the Risks around Energized Equipment
- ☺ Develop a Job Specific Safety Plan
- ☺ Safe Operation and Maintenance Procedures
- ☺ Framework for Electrical Incident and Accident Investigation
- ☺ Accident Investigation and Analysis
- ☺ Approach Boundaries
- ☺ Electrical Hazard Analysis
- ☺ Administrative Controls for Electrical Work
- ☺ Hazard Assessment Tables and Recommended Controls
- ☺ Witnesses and Interviews
- ☺ Capturing the Human Factor
- ☺ Case Studies
- ☺ Discussion and Conclusion
- ☺ Course Wrap Up

23 Safety, Ethics, Laws & Regulations

Advanced Training On Interconnection Transmission Operations And Deregulated Electricity Market

Course Contents:

(Code No: OS-201)

- ☺ Interconnection transmission operations
- ☺ Interconnection transmission services and pricing
- ☺ Power quality and harmonics effect on interconnected systems
- ☺ Market design and congestion management
- ☺ Business models for interconnection transmission investment and operations
- ☺ Electricity markets and risk managements

24 Projects Management

Planning & Scheduling using MS Project 2010

(Code No: P-100)

Course Contents:

- ☺ Introduction
- ☺ Setting Up
- ☺ Project Files
- ☺ Creating Tasks
- ☺ Creating Resources
- ☺ Assigning Tasks to Resources
- ☺ Working with Views
- ☺ Fine-Tuning the Project Schedule
- ☺ Tracking and Managing Projects
- ☺ Cost allocation, Cost Tracking and updating Budget and progress monitoring using S-curves
- ☺ Resources leveling Creating reports (tasks, resources, cost,)



24

Projects Management**Leadership**

(Code No: P-101)

Course Contents:

This course helps participants gain insight into the unique characteristics that influence their management practices and leadership of people. This course enables participants understand how to use leadership skills to exercise influence for improving personal, interpersonal, and organizational performance and effectiveness. Self-assessment, skill development, case analysis, and interpersonal exercises used to improve understanding of topics such as contrasts between management and leadership, empowerment, vision, team leadership, leading change and others.

Technical Proposals

(Code No: P-102)

Course Contents:

This course is designed to give the trainee a good background of the technical proposals requirements according to the rules and guidelines of the international financial institution (i.e. the World Bank or the European Investment Bank), the course description is as following:

- Technical Proposal Submission Form
- Consultant's Organization and Experience
- Comments and Suggestions on the Terms of Reference
- Description of Approach, Methodology and Work Plan
- Technical Approach and Methodology
- Work Plan
- Organization and Staffing
- Team Composition and Task Assignments
- Curriculum Vitae (CV) for proposed Personnel Staff
- Staffing Schedule
- Criteria for Evaluation of Technical Proposals

24 Projects Management

→ Job Analysis, Job Description & Key Performance Indicator (KPI)

(Code No: B1-118)

Course Contents:

- ☺ Understanding the concepts of:-
 - * Strategic Human Resource Management and the HR Scorecard
 - * Job Analysis
 - * Organization Structures
 - * Key Performance Indicator (KPI)

→ Manpower Plan, Recruitment, Selection & Labor Low

(Code No: B1-119)

Course Contents:

- ☺ Understanding the concepts of:-
 - * Manpower Plan
 - * Recruitment
 - * Manpower Selection
 - * Interviewing Candidates
 - * Labor Low

→ Performance Appraisal, Training & Development, and Motivation

(Code No: B1-117)

Course Contents:

- ☺ Understanding the concepts of:-
 - * Performance Appraisal
 - * Benefits and Services
 - * Ethics, Justice, and Fair Treatment in HR Management
 - * Training and Developing Employees
 - * Managing Global Human Resources

27 Power Stations**Tanks & Vessels Inspection****Course Contents:**

(Code No: G-101)

- ☉ The Function of the Tanks and Pressure Vessels
- ☉ The Common Designs & the Application of Each Design
- ☉ The Tank Mixers (agitators) - the Function and Different Designs
- ☉ The Periodic Inspection
- ☉ The Common Operational and Maintenance Problems
- ☉ The remedial / repair actions
- ☉ Safety Requirement during Inspection and Maintenance Jobs
- ☉ Corrosion Control Methods
- ☉ Material Selection
- ☉ Protective Coating & Lining
- ☉ Cathodic Protection
- ☉ Corrosion Inhibition
- ☉ Degassing
- ☉ Environments

Steam Turbine**Course Contents:**

(Code No: G-102)

- ☉ Turbine Types
- ☉ Efficiency and output
- ☉ Thermodynamic of steam cycle
- ☉ Economics of steam cycle
- ☉ Turbine blading (impulse , reaction & low pressure stages)
- ☉ Blading material
- ☉ Blade vibration control
- ☉ Supercritical plant

**27 How to Register with EPS**

- ☉ The online registration form can be accessed at www.eps-egypt.com/Training/Train.aspx
- ☉ Any changes to the schedule will be posted promptly in EPS Website.
- ☉ Upon online registration, trainee(s) will receive an electronic ticket number.



28 Registration Policy

Registration deadline

Registration should be completed and fees should be paid not later than one week before the beginning of the training program.

Registration fees

Course fees vary. Prices are determined for each course based on number of trainees. Because classes fill quickly, registration is recommended to be completed online as early as possible. To get the most out of your training budget, **EPS** offers several discount offers (see Training Discount Offers).

Registration confirmation

Registration is not confirmed unless the registration fees are paid. Registration confirmation notice will be sent to your email once your online registration is completed.

Cancellation policy

Registration can be cancelled with full reimbursement of your fees up to one day before the beginning of the training program. Fees are not refundable after the training program starting date.

Hotel accommodation

EPS Training services does not include any accommodation arrangements. Information regarding recommended hotels convenient to the training facilities can be found in our website.

28 Training Discount Offers



Special discounts up to 30% are offered for the following:

- Group Registration: Minimum of 5 trainees to register together
- Corporate Registration: Minimum of 3 trainees from the same company
- Students Registration: Trainee should be enrolled in a university, and a university proof should be submitted with fees payment
- Early registration : for registration 4 weeks before the starting date

For complete registration information, visit
www.eps-egypt.com/Training/Train.aspx



Training Schedule for (2016/2017)

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TRAINING CATALOGUE

Month	Programs		Application deadline	Program time frame			Class No.
	Name	Code No.		Begin Date	End Date	Duration	
May	Power Systems Grounding	OS-105	27/04/2014	04/05/2014	08/05/2014	5 Days	CL 1
	Smart Grid Technologies, Markets, Components and Trends	OS-202	04/05/2014	11/05/2014	15/05/2014	5 Days	CL 1
	Information Security Control and Management (ISCMS)	C1-101	04/05/2014	11/05/2014	15/05/2014	5 Days	CL 2
	Insulation Coordination for Power Systems	OS-103	11/05/2014	18/05/2014	22/05/2014	5 Days	CL 1
	Design Concepts for Overhead Transmission Lines	N2-101	11/05/2014	18/05/2014	22/05/2014	5 Days	CL 2
	Job Analysis, Job Description, & Key Performance Indicator (KPI)	B1-118	18/05/2014	25/05/2014	29/05/2014	5 Days	CL 1
	Information Security Control and Management (ISCMS) Advanced	C1-102	18/05/2014	25/05/2014	29/05/2014	5 Days	CL 2
June	Advanced Enterprise Asset Management	OS-203	25/05/2014	01/06/2014	05/06/2014	5 Days	CL 1
	Planning & Scheduling using MS Project 2010	P-100	25/05/2014	01/06/2014	05/06/2014	5 Days	CL 2
	Performance Appraisal, Training & Development, and Motivation	B1-117	01/06/2014	08/06/2014	12/06/2014	5 Days	CL 1
	Power Quality and Harmonics	OS-106	01/06/2014	08/06/2014	12/06/2014	5 Days	CL 2
	Leadership	P-101	08/06/2014	15/06/2014	19/06/2014	5 Days	CL 1
	Technical Proposals	P-102	15/06/2014	22/06/2014	26/07/2014	5 Days	CL 1
	Structure Analysis And Design	N4-103	15/06/2014	22/06/2014	26/07/2014	5 Days	CL 2
August	HVDC Transmission and Control	OS-102	27/07/2014	03/08/2014	14/08/2014	10 Days	CL 1
	Smart Grid Technologies, Markets, Components and Trends	OS-202	10/08/2014	17/08/2014	21/08/2014	5 Days	CL 1
	Planning & Scheduling using MS Project 2010	P-100	17/08/2014	24/08/2014	28/08/2014	5 Days	CL 1
	Manpower Plan, Recruitment, Selection & Labor Low	B1-119	24/08/2014	31/08/2014	04/09/2014	5 Days	CL 1
	Power Systems Protection and Analysis	OS-104	24/08/2014	31/08/2014	04/09/2014	5 Days	CL 2

Training Schedule for (2016/2017)



TRAINING CATALOGUE

Month	Programs		Application deadline	Program time frame			Class No.
	Name	Code No.		Begin Date	End Date	Duration	
September	Information Security Control and Management (ISCMS)	C1-101	01/09/2014	07/09/2014	11/09/2014	5 Days	CL 1
	Leadership	P-101	01/09/2014	07/09/2014	11/09/2014	5 Days	CL 2
	Structure Analysis And Design	N4-103	07/09/2014	14/09/2014	18/09/2014	5 Days	CL 1
	Electrical Accident Investigation and System Safety	OS-101	14/09/2014	21/09/2014	25/09/2014	5 Days	CL 1
	Information Security Control and Management (ISCMS) Advanced	C1-102	14/09/2014	21/09/2014	25/09/2014	5 Days	CL 2
October	Design Concepts for Overhead Transmission Lines	N2-101	05/10/2014	12/10/2014	16/10/2014	5 Days	CL 1
	Advanced Training On Interconnection Transmission Operations And Deregulated Electricity Market	OS-201	05/10/2014	12/10/2014	16/10/2014	5 Days	CL 2
	Electrical Switchgear Selection and Operation	OS-100	14/10/2014	19/10/2014	23/10/2014	5 Days	CL 1
	Performance Appraisal, Training & Development, and Motivation	B1-117	19/10/2014	26/10/2014	30/10/2014	5 Days	CL 1
	Technical Proposals	P-102	02/11/2014	09/11/2014	13/11/2014	5 Days	CL 1
November	Job Analysis, Job Description, & Key Performance Indicator (KPI)	B1-118	09/11/2014	16/11/2014	20/11/2014	5 Days	CL 1
	Real-time Operations and Reliability Readiness	OS-108	10/11/2014	16/11/2014	20/11/2014	5 Days	CL 2
	Information Security Control and Management (ISCMS)	C1-101	16/11/2014	23/11/2014	27/11/2014	5 Days	CL 1
December	Information Security Control and Management (ISCMS) Advanced	C1-102	30/11/2014	07/12/2014	11/12/2014	5 Days	CL 1
	Structure Analysis And Design	N4-103	07/12/2014	14/12/2014	18/12/2014	5 Days	CL 1
	Leadership	P-101	07/12/2014	14/12/2014	18/12/2014	5 Days	CL 2
	Reactive Power Management and Power Factor Correction	OS-107	14/12/2014	21/12/2014	25/12/2014	5 Days	CL 1
January	Advanced Enterprise Asset Management	OS-203	11/01/2015	18/01/2015	22/01/2015	5 Days	CL 1
	Power Systems Grounding	OS-105	11/01/2015	18/01/2015	22/01/2015	5 Days	CL 2

Training Schedule for (2016/2017)

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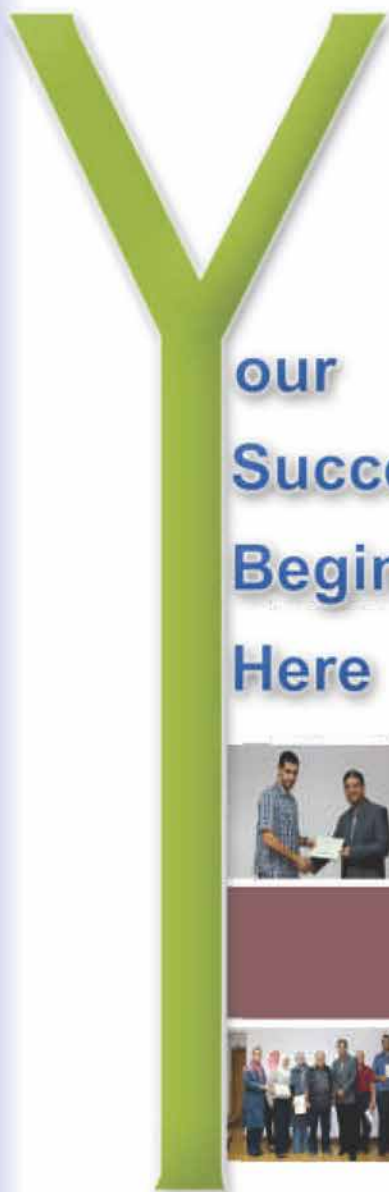
TRAINING CATALOGUE

Month	Programs		Application deadline	Program time frame			Class No.
	Name	Code No.		Begin Date	End Date	Duration	
February	Insulation Coordination for Power Systems	OS-103	26/01/2015	01/02/2015	05/02/2015	5 Days	CL 1
	Design Concepts for Overhead Transmission Lines	N2-101	26/01/2015	01/02/2015	05/02/2015	5 Days	CL 2
	Planning & Scheduling using MS Project 2010	P-100	01/02/2015	08/02/2015	12/02/2015	5 Days	CL 1
	Power Quality and Harmonics	OS-106	08/02/2015	15/02/2015	19/02/2015	5 Days	CL 1
	Manpower Plan, Recruitment, Selection & Labor Low	B1-119	15/02/2015	22/02/2015	26/02/2015	5 Days	CL 1
March	Information Security Control and Management (ISCMS)	C1-101	22/02/2015	01/03/2015	05/03/2015	5 Days	CL 1
	Technical Proposals	P-102	22/02/2015	01/03/2015	05/03/2015	5 Days	CL 2
	HVDC Transmission and Control	OS-102	01/03/2015	08/03/2015	12/03/2015	10 Days	CL 1
	Advanced Training On Interconnection Transmission Operations And Deregulated Electricity Market	OS-201	01/03/2015	08/03/2015	12/03/2015	10 Days	CL 2
	Design Concepts for Overhead Transmission Lines	N2-101	08/03/2015	15/03/2015	21/03/2015	5 Days	CL 1
	Information Security Control and Management (ISCMS) Advanced	C1-102	08/03/2015	15/03/2015	21/03/2015	5 Days	CL 2
	Power Systems Protection and Analysis	OS-104	22/03/2015	29/03/2015	02/04/2015	5 Days	CL 1
April	Structure Analysis And Design	N4-103	05/04/2015	12/04/2015	16/04/2015	5 Days	CL 1
	Electrical Accident Investigation and System Safety	OS-101	05/04/2015	12/04/2015	16/04/2015	5 Days	CL 2
	Electrical Switchgear Selection and Operation	OS-100	19/04/2015	26/04/2015	30/04/2015	5 Days	CL 1
	Leadership	P-101	19/04/2015	26/04/2015	30/04/2015	5 Days	CL 2
May	Technical Proposals	P-102	26/04/2015	03/05/2015	07/05/2015	5 Days	CL 1
	Real-time Operations and Reliability Readiness	OS-108	03/05/2015	10/05/2015	14/05/2015	5 Days	CL 1
	Planning & Scheduling using MS Project 2010	P-100	03/05/2015	10/05/2015	14/05/2015	5 Days	CL 2
	Reactive Power Management and Power Factor Correction	OS-107	24/05/2015	24/05/2015	28/05/2015	5 Days	CL 2

* Number of trainees for each training program will not be more than 15 trainees.

Training Includes:

- 📄 Certificate of attendance
- 📁 Course material
- ☕ Tea, Nescafe, and Water
- 🍽️ Catering meal: Sandwich & drink



our
Success
Begins
Here





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Designed By Sherine Shehata