

خطة تدريب الدورات التأهيلية للمهندسين – قسم التشغيل Qualifying Courses Training Plan for Engineers - Operation

NO	Course Name	Hours	CEU
1	Registration & Management Meeting	12	1.0
2	Hazamat	18	1.5
3	Introduction To Mechanical Equipment	30	2.5
4	Introduction To Power Plants	30	2.5
5	Occupational Safety And Health	30	2.5
6	Effective Communication	18	1.5
7	Auxiliary Plant Part-1	30	2.5
8	Auxiliary Plant Part-2	30	2.5
9	Boiler Technology - I & (Ii)	60	5.0
10	Fuel Combustion And Pollution	18	1.5
11	Effective Meetings Management	18	1.5
12	Scale & Corrosion And Its Prevention	30	2.5
13	Multi-Stage Flash Technology	30	2.5
14	Gas Turbine And Heat Recovery Steam Generator	30	2.5
15	Steam Turbine Technology - I & (Ii) & Generator Seal Systems	66	5.5
16	Reverse Osmosis Desalination Technology	30	2.5
17	Process Control & Process Measurement For Operators	40	3.3
18	Med Desalination Plant Technology	30	2.5
19	Electrical Equipment Operation	30	2.5
20	Auxiliary Plant Part-3	40	3.3
21	Electrical Distribution System	20	1.7
22	Electrical Protection Systems And Monitoring	30	2.5
23	Decision Making	18	1.5
24	Electrical Simulator Application System	30	2.5
25	Plant Chemistry For Engineers	26	2.2
26	Report Writing And Analysis	18	1.5
27	Introduction To Permit To Work	30	2.5
Total		792	66

خطة تدريب الدورات التأهيلية للمهندسين – قسم الميكانيكا

Qualifying Courses Training Plan for Engineers - Mechanical

NO	Course Name	Hours	CEU
1	Registration & Management Meeting	12	1.0
2	Effective Communication	18	1.5
3	Occupational Safety And Health	30	2.5
4	Introduction To Mechanical Equipment	30	2.5
5	Introduction To Power Plants	30	2.5
6	Boiler Technology - I & (Ii)	30	2.5
7	Hazamat	18	1.5
8	Steam Turbine Technology - I & (Ii) & Generator Seal Systems	30	2.5
9	Decision Making	18	1.5
10	Gas Turbine And Heat Recovery Steam Generator	30	2.5
11	Multi-Stage Flash Technology	30	2.5
12	Scale & Corrosion And Its Prevention	30	2.5
13	Reverse Osmosis Desalination Technology	30	2.5
14	Med Desalination Plant Technology	30	2.5
15	Utility Systems	30	2.5
16	Effective Meetings Management	18	1.5
17	Introduction To Permit To Work	30	2.5
18	Report Writing And Analysis	18	1.5
19	Basic Electrical Engineering	18	1.5
20	Basic Instrumentation	18	1.5
21	Welding Technology	30	2.5
22	Machinshop Technology	30	2.5
23	Valves, Steam Traps And Piping Components -I	30	2.5
24	Heat Exchanger Maintenance	30	2.5
25	Bearing And Lubrication	18	1.5
26	Plant Pump Maintenance	36	3.0
27	Machine Alignment	30	2.5
28	Plant Compressors Maintenance And Overhaul	30	2.5
29	Boiler Maintenance	30	2.5
30	Steam Turbine Maintenance And Overhaul	30	2.5
Total		792	66

خطة تدريب الدورات التأهيلية للمهندسين – قسم الكهرباء Qualifying Courses Training Plan for Engineers – Electrical

NO	Course Name	Hours	CEU
1	Registration & Management Meeting	12	1.0
2	Effective Communication	18	1.5
3	Occupational Safety And Health	30	2.5
4	Introduction To Mechanical Equipment	30	2.5
5	Introduction To Power Plants	30	2.5
6	Boiler Technology - I & (li)	30	2.5
7	Hazamat	18	1.5
8	Steam Turbine Technology - I & (li) & Generator Seal Systems	30	2.5
9	Decision Making	18	1.5
10	Gas Turbine And Heat Recovery Steam Generator	30	2.5
11	Multi-Stage Flash Technology	30	2.5
12	Scale & Corrosion And Its Prevention	30	2.5
13	Reverse Osmosis Desalination Technology	30	2.5
14	Med Desalination Plant Technology	30	2.5
15	Utility Systems	30	2.5
16	Effective Meetings Management	18	1.5
17	Introduction To Permit To Work	30	2.5
18	Report Writing And Analysis	18	1.5
19	Dc & Ups Systems & Batteries	30	2.5
20	Fundamentals Of Air Conditioning	36	3.0
21	Motor Overhaul And Rewinding	54	4.5
22	Basic Print Reading	30	2.5
23	Electric Generator	60	5.0
24	Protection Systems	30	2.5
25	Transformer Maintenance	30	2.5
26	Switchgear Maintenance	30	2.5
27	Motor Control - 1	30	2.5
Total		792	66

خطة تدريب الدورات التأهيلية للمهندسين – قسم الأجهزة Qualifying Courses Training Plan for Engineers – Instruments

NO	Course Name	Hours	CEU
1	Registration & Management Meeting	12	1.0
2	Effective Communication	18	1.5
3	Occupational Safety And Health	30	2.5
4	Introduction To Mechanical Equipment	30	2.5
5	Introduction To Power Plants	30	2.5
6	Boiler Technology - I & (li)	30	2.5
7	Hazamat	18	1.5
8	Steam Turbine Technology - I & (li) & Generator Seal Systems	30	2.5
9	Decision Making	18	1.5
10	Gas Turbine And Heat Recovery Steam Generator	30	2.5
11	Multi-Stage Flash Technology	30	2.5
12	Scale & Corrosion And Its Prevention	30	2.5
13	Reverse Osmosis Desalination Technology	30	2.5
14	Med Desalination Plant Technology	30	2.5
15	Utility Systems	30	2.5
16	Effective Meetings Management	18	1.5
17	Introduction To Permit To Work	30	2.5
18	Report Writing And Analysis	18	1.5
19	Dc & Ups Systems & Batteries	30	2.5
20	Reading Of P& Instrument Drawings	36	3.0
21	Smart Instruments	30	2.5
22	Instruments Characteristics	18	1.5
23	Control Valves	35	2.9
24	Advanced Pressure Measurements	40	3.3
25	Advanced Level Measurements	35	2.9
26	Advanced Flow Measurements	32	2.7
27	Advanced Temperature Measurements	32	2.7
28	Process Control	42	3.5
Total		792	66

خطة تدريب الدورات التأهيلية للمهندسين – قسم المدنية Qualifying Courses Training Plan for Engineers – Civil

NO	Course Name	Hours	CEU
1	Registration & Management Meeting	12	1.0
2	Effective Communication	18	1.5
3	Occupational Safety And Health	30	2.5
4	Introduction To Mechanical Equipment	30	2.5
5	Introduction To Power Plants	30	2.5
6	Boiler Technology - I & (li)	30	2.5
7	Hazamat	18	1.5
8	Steam Turbine Technology - I & (li) & Generator Seal Systems	30	2.5
9	Decision Making	18	1.5
10	Gas Turbine And Heat Recovery Steam Generator	30	2.5
11	Multi-Stage Flash Technology	30	2.5
12	Scale & Corrosion And Its Prevention	30	2.5
13	Reverse Osmosis Desalination Technology	30	2.5
14	Med Desalination Plant Technology	30	2.5
15	Utility Systems	30	2.5
16	Effective Meetings Management	18	1.5
17	Introduction To Permit To Work	30	2.5
18	Report Writing And Analysis	18	1.5
19	Basic Electrical Engineering	18	1.5
20	Basic Instrumentation	18	1.5
21	Concrete Treatment	30	2.5
Total		528	44

خطة تدريب الدورات التأهيلية للمشغلين – قسم تشغيل الحراري

Qualifying Courses Training Plan for Operators – Thermal Operation

NO	Course Name	Hours	CEU
1	Registration & Management Meeting	12	1.0
2	Effective Communication	18	1.5
3	Occupational Safety And Health	30	2.5
4	Introduction To Mechanical Equipment	30	2.5
5	Introduction To Power Plants	30	2.5
6	Boiler Technology - I & (ii)	30	2.5
7	Hazamat	18	1.5
8	Steam Turbine Technology - I & (ii) & Generator Seal Systems	30	2.5
9	Decision Making	18	1.5
10	Gas Turbine And Heat Recovery Steam Generator	30	2.5
11	Multi-Stage Flash Technology	30	2.5
12	Scale & Corrosion And Its Prevention	30	2.5
13	Reverse Osmosis Desalination Technology	30	2.5
14	Med Desalination Plant Technology	30	2.5
15	Utility Systems	30	2.5
16	Effective Meetings Management	18	1.5
17	Introduction To Permit To Work	30	2.5
18	Report Writing And Analysis	18	1.5
19	Basic Electrical Engineering	18	1.5
20	Basic Instrumentation	18	1.5
21	Concrete Treatment	30	2.5
Total		528	44

خطة تدريب الدورات التأهيلية للمشغلين – قسم تشغيل التحلية

Qualifying Courses Training Plan for Operators – Desalination Operation

NO	Course Name	Hours	CEU
1	PLANT VISIT	30	2.5
2	MSF DESALINATION PLANTS TECHNOLOGY, CYCLES AND CONTROLS	40	3.3
3	R.O. DESALINATION PLANTS TECHNOLOGY	30	2.5
4	MSF DESALINATION PLANTS OPERATIONS.	30	2.5
5	R.O. DESALINATION PLANTS OPERATIONS	25	2.1
6	PLANT VISIT	30	2.5
7	MED DESALINATION PLANTS TECHNOLOGY	10	0.8
8	MED DESALINATION PLANTS OPERATION.	30	2.5
9	SCALE AND CORROSION IN MSF DESALINATION PLANT.	15	18.8
Total		240	37.5

خطة تدريب الدورات التأهيلية للمشغلين – قسم تشغيل الآلات مساعدة Qualifying Courses Training Plan for Operators – Auxiliary Operation

NO	Course Name	Hours	CEU
1	PLANT VISIT	30	2.5
2	UTILITIY SYSTEMS PART#1	50	4.2
3	UTILITIY SYSTEMS PART#2	50	4.2
4	UTILITIY SYSTEMS PART#3	50	4.2
5	DIESEL ENGINE (REPLACE)	30	2.5
6	PLANT VISIT	30	2.5
Total		240	20

خطة تدريب الدورات التأهيلية للفنيين – قسم صيانة الميكانيكا

Qualifying Courses Training Plan for Technicians – Mechanical Maintenance

NO	Course Name	Hours	CEU
1	TECHNICAL ENGLISH	60	5.0
2	WORKSHOP PRACTICES	55	4.6
3	INTRODUCTION TO MECHANICS	15	1.3
4	PIPE AND PIPE FITTING	25	2.1
5	DESALINATION UNIT	24	2.0
6	PLANT VISIT	6	0.5
7	ANCILLARY EQUIPMENT	15	1.3
8	BEARING & LUBRICATION	20	1.7
9	HEAT EXCHANGER MAINT.	30	2.5
10	COUPLINGS & DRIVES	20	1.7
11	TURBINE MAINTENANCE	34	2.8
12	PLANT VISIT	6	0.5
13	PUMPS MAINTENANCE	24	2.0
14	PLANT VISIT	6	0.5
15	VALVES&VALVE MAINT.	14	1.2
16	PLANT VISIT	11	0.9
17	COMPRESSORS & FANS MAINT.	25	2.1
18	BOILER MEANTENANCE	24	2.0
19	PLANT VISIT	6	0.5
Total		420	35

خطة تدريب الدورات التأهيلية للفنيين – قسم صيانة الكهرباء

Qualifying Courses Training Plan for Technicians – Electrical Maintenance

NO	Course Name	Hours	CEU
1	TECHNICAL ENGLISH	60	5.0
2	ELECTRICAL PRINT READING	24	2.0
3	ELECTRIC BASIC & INSTALLTIONS	63	5.3
4	BATTERIES & INVERTERS & RECTIFIERS	44	3.7
5	MOTOR REWINDING	29	2.4
6	TRANSFORMERS	24	2.0
7	PLANT VISIT	6	0.5
8	ELECTRIC MOTORS	44	3.7
9	PROTECTIVE RELAYS	19	1.6
10	ELECTRICAL CONTROL EQUIP.	43	3.6
11	SWITCHGEAR MAINTENANCE	19	1.6
12	GENERATORS	19	1.6
13	PLANT VISIT	6	0.5
14	CABLE JOINTING AND MAINTENANCE	20	1.7
Total		420	35

خطة تدريب الدورات التأهيلية للفنيين – قسم صيانة الاجهزة

Qualifying Courses Training Plan for Technicians – Instrument Maintenance

NO	Course Name	Hours	CEU
1	BASICS OF ELECTRICITY	16	1.3
2	D.C. CIRCUITS	17	1.4
3	A.C. CIRCUITS	18	1.5
4	BASIC ELECTRONICS	30	2.5
5	DIGITAL ELECTRONICS	15	1.3
6	PLANT VISIT	6	0.5
7	INTRO. TO INSTRUMENTATION	15	1.3
8	INSTRUMENTATION TEST EQUIP	15	1.3
9	CONTROL VALVES MAINT.	32	2.7
10	PRESSURE MEAS/MAINT	43	3.6
11	LEVEL MEASUREMENT/MAINT	23	1.9
12	FLOW MEASUREMENT/MAINT	30	2.5
13	TEMP. MEASUREMENT/MAINT	31	2.6
14	PLANT VISIT	6	0.5
15	ANALYZER MEASUREMENT/MAINT	15	1.3
16	PROCESS CONTROL	33	2.8
17	BASICS OF ELECTRICITY	15	1.3
Total		360	30

خطة تدريب الدورات التأهيلية للفنيين – قسم صيانة التكييف Qualifying Courses Training Plan for Technicians – A/C Maintenance

NO	Course Name	Hours	CEU
1	TECHNICAL ENGLISH	60	5.0
2	WELDING	60	5.0
3	ELECTRIC CIRCUITS AND CONTROLS	70	5.8
4	REFRIGIERATION MAINTENANCE	94	7.8
5	PLANT VISIT	6	0.5
6	ELECTRICAL MOTORS	70	5.8
7	ASSIGNMENT	60	5.0
Total		420	35

خطة تدريب الدورات التأهيلية للفنيين – قسم صيانة الات الورش Qualifying Courses Training Plan for Technicians –Machinist Maintenance

NO	Course Name	Hours	CEU
1	TECHNICAL ENGLISH	60	5.0
2	MEASUREMENT TECHNOLOGY	35	2.9
3	BENCH WORK	50	4.2
4	MALLING	95	7.9
5	LATHE ENGINE	100	8.3
6	PLANT VISIT	6	0.5
7	SHABER	74	6.2
Total		420	35

خطة تدريب الدورات التأهيلية للفنيين – قسم صيانة اللحام Qualifying Courses Training Plan for Technicians – Welding Maintenance

NO	Course Name	Hours	CEU
1	TECHNICAL ENGLISH	60	5.0
2	WELDING SYMBOLS	30	2.5
3	ELECTRICITY AND ELECTRICAL SAFETY	30	2.5
4	OXYACETYLENE WELDING, CUTTING & BRAZING	100	8.3
5	SHIELED METAL ARC WELDING BASIC	98	8.2
6	PLANT VISIT	6	0.5
7	GAS TUNGSTEN ARC WELDING	96	8.0
Total		420	35