



GIL 2010 PUBLIC PROGRAMMES (PORTHARCOURT / LAGOS)

COURSE CODES	COURSE TITLE	CONTENT DELIVERABLES <small>View brochure for more</small>	RECOMMENDED FOR	PREREQUISIT E	FEES(N)	DUR (DYS)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
							FUNDAMENTAL SKILLS											
ETAP 113	ETAP: Power Systems Engineering 1	Short Circuit(IEC & ANSI), Load Flow, Transient Stability, Arcflash Analysis, Motor Acceleration etc	Intermediate Engrs. Advanced Engrs.	No requirements	150,000.00	3			25-27(LAG)			25-27(LAG)		13-15(LAG)			12-14(LAG)	
GIL 105	FieldBus Essentials: HART, Profibus, Foundation FieldBus	Networks for process automation HART, Foundation, FieldbusHA, ProfibusPA, Installation, commissioning, Troubleshooting etc	Instrumentation, Control & automation Engrs., Maintenance & computer Engrs.	GIL 165 & GIL175 or Equivalent relevant Experience	100,000.00	5			26-30(PHC)				2-6(LAG)				5-9(LAG)	
GIL115	PLC Automation I: Programming, Maintenance and Troubleshooting	Introduction to PLC Hardware, language-LD, IL, FBD, ST etc. Use of Timers & counters, connection of field devices etc	Basic Knowledge of Electrical/Electronics	GIL 175 or equivalent relevant experience	100,000.00	5			16-20(PHC)				9-13(LAG)				22-26(LAG)	
GIL125	Pneumatics: Operation & Troubleshooting	Pneumatic principles & power variables Valves, actuators & Dampers, Pneumatic Relays, Pneumatic control systems etc.	Design, Installation, Operation & maintenance Engrs./Technicians on pneumatic system	GIL 165 or Equivalent Relevant Experience	100,000.00	5			2-6(PHC)				16-20(LAG)					
GIL135	Hydraulics: Operation & Troubleshooting	Fluid power principles, Pumps & motors, Valves, actuators & Dampers, Hydraulic fluid selection, System design for hydraulic control etc.	Design, Installation, Operation & maintenance Engrs./Technicians on hydraulic system	GIL 165 or Equivalent Relevant Experience	100,000.00	5			9-13(PHC)				23-27(LAG)					
GIL145	SCADA, HMI & DCS I - Fundamentals	Introduction to SCADA systems, DCS & HMI, DCS block diagrams & architecture, DCS hardware & software etc.	Instrumentation, Control & automation Engrs., Maintenance & computer Engrs.	GIL 175 or equivalent relevant experience	100,000.00	5			19-23(PHC)			25-29(LAG)						12-16(LAG)
GIL165	Instrumentation, Process & Control Essentials	Sensors & Transducers principles, Process variables, process control modes, P&ID interpretation skills etc.	Design, Installation, Operation & maintenance Engrs./Technicians .	No requirements	100,000.00	5			5-9(PHC)			11-15(LAG)					8-12(LAG)	
GIL175	Automation 101: Introduction to Automation & Control	Basic mathematics for process control, Evolution of process control/automation, Ratio control, Adaptive control etc	Design, Installation, Operation & maintenance Engrs./Technicians .	No requirements	100,000.00	5			12-16(PHC)			18-22(LAG)					15-19(LAG)	
GIL185	Process Instruments: Maintenance & Calibration Techniques	selection of measurement & control devices, Repair modes & records, failure mode analysis, Troubleshooting instrument error etc.	Design, Installation, Operation & maintenance Engrs./Technicians .	GIL 165 or Equivalent Relevant Experience	100,000.00	5			23-27(PHC)					6-10(LAG)			19-23(LAG)	
GIL195	Pumps, Valves & Compressors: Principles, Operation & Maintenance	Types of valves & functions, Symbols of valves, Valve selecting, sizing & maintenance, Principles of operations of compressors etc.	Instrument & control Engrs. & Technicians, Facility managers & system integrators	GIL 165 or Equivalent Relevant Experience	100,000.00	5					30-04(PHC)			13-17(LAG)			26-30(LAG)	
PROFESSIONAL AND TECHNICAL SKILLS																		
GIL215	PLC Automation II : Design & Implementation	Site layout plan, Wiring diagrams, Components specifications & constraints, Systems & component behaviour & constraints etc.	Design, Installation, Operation & maintenance Engrs./Technicians on PLC control system.	GIL 115 or Equivalent Relevant Experience	100,000.00	5							7-11(PHC)				20-24(LAG)	
GIL225	Electro-pneumatic & Electro -hydraulic Systems	Basic concepts of e-pneumatic circuits: ladder diagrams, industrial electro-pneumatic circuits, Electrical concepts, Functional electrically controlled hydraulic systems etc.	Design, Installation, Operation & maintenance Engrs./Technicians on hydraulic /pneumatic system	GIL 135 & GIL125 or Equivalent relevant Experience	100,000.00	5							14-18(PHC)				27-31(LAG)	
GIL265	Instrumentation, Process & Controls II	Introduction to process control, Automatic control system principles, Reset of integral action, Rate of derivative action, Multiple control modes etc	Design, Installation, Operation & maintenance Engrs./Technicians .	GIL 165 or Equivalent Relevant Experience	100,000.00	5							21-25(PHC)				3-7(LAG)	
GIL245	SCADA, HMI - Advanced	SCADA System design, Typical installation, Building User Interface, Configuration, Design & layout, HMI configuration, Alarm system design, Troubleshooting etc	Instrumentation, Electrical, Mechanical & Process Engrs. Maintenance Engr. & Supervisors.	GIL 145 or Equivalent Relevant Experience	100,000.00	5							28-01(PHC)				10-14(LAG)	
GIL255	DCS II - Advanced	DCS Design & Layout, Typical installation, Building user interface, Configuration, Troubleshooting, Maintenance tasks etc.	Instrumentation, Electrical, Mechanical & Process Engrs. Maintenance Engr. & Supervisors.	GIL 145 or Equivalent Relevant Experience	100,000.00	5							4-8(PHC)				17-21(LAG)	
S/N	SPECIAL COURSES (Available on Request)																	DUR
GIL305	Plant Historian & Alarm Management System					5	GIL355 Industrial Plant: Startup, Testing & Commissioning											5
GIL315	INTOOLS & INSTRUCALC: Instrumentation Design					5	GIL365 Electrical & Control Panels: Building & Troubleshooting											5
GIL325	Power Substation : Startup, Testing & Commissioning					5	GIL373 ESD: Emergency Shutdown Systems											3
GIL335	OPC Integration & Diagnostics I & II					5	GIL385 Variable Speed Drives; Principles, Operation & Maintenance											5
GIL343	Fire & Gas Systems: Design & Implementation					3	GIL395 Modern Electrical Power Systems											5



- * THE SPECIAL COURSES ARE AVAILABLE ON REQUEST
- * CORPORATE TRAININGS MODIFIED TO MEET ORGANISATIONAL CALENDAR
- * BULK REGISTRATION ATTRACTS A DISCOUNT

