

Annexure I

Training Delivery Plan

Training Delivery Plan			
Program Name:	Assistant Technician-Drilling (Oil & Gas)		
Qualification Pack Name & Ref. ID	Assistant Technician-Drilling (Oil & Gas), HYC/Q 0101		
Version No.	1.0	Version Update Date	31/03/2019
Pre-requisites to Training (if any)	Class XII or Class X+2 year of ITI course		
Training Outcomes	By the end of this program, the participants will be able to:		
	1. Learn to perform drilling operation		
	2. Comprehend to occupational health and safety		
	3. Learn to work effectively with colleagues and supervisor		
	4. Learn Soft Skills		
5. Learn Communication Skills			

Sr. No.	Module Name	Session Name	Session Objectives	NOS Reference	Methodology	Training Tools/Aids	Duration (hours)
1	Perform Drilling Operation	Oil & Gas Drilling Processes (Session 1)	Knowing Organisational SOP on Drilling Process. Knowing basic Oil & Gas Drilling Process and Operations. Filling up appropriate technical forms, activity logs in required format of the company Planning and organize their own work schedule, work area, tools, equipment and materials to maintain decorum and for improved productivity	HYC/N0101 KA 1, KB 1, SA 1, SB 1	Classroom lecture/PPT Session	Computer, Computer Peripherals (Optional), Black/white board, marker/ chalk, duster.	8 hours
			Practical Understanding and knowledge of the types of Oil & Gas Wells Understanding Platform types for underwater drilling Submersible barges and platforms. Understanding of working at height, operation at monkey board, top man escape device Having knowledge of the Wellhead	HYC/N0101 PC 1, PC 2, PC 7, PC 8,	Practical Sessions/ Video Session	Laptop, projector, sound system, Internet connection	8 hours

			<ul style="list-style-type: none"> • Risking and impacting of not following defined procedures/ work instructions • Communicating in the local language (preferable) • Thinking through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s) 	<p>HYC/N0101</p> <p>KA 2, SA 7, SB 2</p>	Classroom lecture/PPT Session	Computer, Computer Peripherals (Optional), Black/white board, marker/ chalk, duster.	8 hours
		Oil & Gas Drilling Processes (Session 2)	<p>Practical</p> <ul style="list-style-type: none"> • Having knowledge of the on shore Well Components • Identifying Upstream process sections: Wellhead, Manifolds and gathering, Separation, Metering, storage and export and Utility systems. • Understanding the Components of Drilling Rig (derrick, floor, drawworks, drive and mud handling, drill string, Drill Collar, Blowout Preventer, turn table, Crown Block, Top drive, Iron Roughneck, Mud Pumps.) • Understanding the components of Well: Well casing - Conductor casing, Surface casing, Intermediate casing, Production casing. 	<p>HYC/N0101</p> <p>PC 3, PC 4, PC 5, PC 6</p>	Practical Sessions/ Video Session	Laptop, projector, sound system, Internet connection	8 hours
		Oil & Gas Drilling Processes (Session 3)	<ul style="list-style-type: none"> • Following basic Maintenance Hand Tools • Identifying immediate or temporary solutions to resolve delays 	<p>HYC/N0101</p> <p>KB 2, SB 3</p>	Classroom lecture/PPT Session	Computer, Computer Peripherals (Optional), Black/white board, marker/ chalk, duster.	8 hours

			<p>Practical</p> <ul style="list-style-type: none"> Performing Artificial lift operation: Rod pumps, electrical submersed pump (ESP), Gas lift and Plunger lift. Having knowledge of the Well work over, intervention and stimulation. Understanding Manifolds and gathering. 	<p>HYC/N0101</p> <p>PC 9, PC 10, PC 11</p>	<p>Practical Sessions/ Video Session</p>	<p>Laptop, projector, sound system, Internet connection</p>	<p>8 hours</p>
		<p>Drilling Techniques (Session 4)</p>	<ul style="list-style-type: none"> Knowing escalation matrix for reporting identified incidents, troubles and/ or emergencies e.g. system failures ,fire and power failures Learning basic Measuring and Marking-out Instruments Identifying sources of support that can be availed of for problem solving for various kind of problems 	<p>HYC/N0101</p> <p>KA 3 KB 3 SB 4</p>	<p>Classroom lecture/PPT Session</p>	<p>Computer, Computer Peripherals (Optional),Black/white board, marker/ chalk, duster.</p>	<p>8 hours</p>
			<p>Practical</p> <ul style="list-style-type: none"> Understanding/ knowledge of the Drilling Methods <ul style="list-style-type: none"> Drilling rigs Percussion or cable drilling Rotary drilling Rotary percussion drilling Electro and turbo drilling Directional drilling explosive drilling and flame piercing 	<p>HYC/N 0101</p> <p>PC 12</p>	<p>Practical Sessions/ Video Session</p>	<p>Laptop, projector, sound system, Internet connection</p>	<p>8 hours</p>

		Drilling Techniques (Session 5)	<ul style="list-style-type: none"> Recording to be maintained and implications of non-maintenance of the same Maintaining proper records as per given format Seeking appropriate assistance from other sources to resolve problems 	HYC/N0101 KA 4 SA 2 SB 5	Classroom lecture/PPT Session	Computer, Computer Peripherals (Optional), Black/white board, marker/chalk, duster.	8 hours
			Practical <ul style="list-style-type: none"> Perform Abandonment Process Perform drilling Operations <ul style="list-style-type: none"> Drilling techniques Drilling mud Casing and cementation 	HYC/N0101 PC 13, PC 14	Practical Sessions/ Video Session	Laptop, projector, sound system, Internet connection	6 hours
		Drilling Techniques (Session 6)	<ul style="list-style-type: none"> Learning basic Engineering Communications Liaisoning and coordination skills Reporting problems that you cannot resolve to appropriate authority Identifying defects in the material and communicate it at the earliest and suggest 	HYC/N0101 KB 4 SA 5 SB 6 SB 7	Classroom lecture/PPT Session	Computer, Computer Peripherals (Optional), Black/white board, marker/chalk, duster	8 hours
			Practical <ul style="list-style-type: none"> Understanding Completion, Enhanced Recovery and work over Operations. Understanding a Typical Drilling Program. 	HYC/N 0101 PC 15, PC 16	Practical Sessions/ Video Session	Laptop, projector, sound system, Internet connection	6 hours

		<ul style="list-style-type: none"> Comprehending SHE and OHS guidelines and regulations as per company's norms Learning basic numerical Skills Reading and understanding manuals, work orders, health and safety instructions, memos, reports etc. Adhering improvements (if any) in process/material based on experience. Applying problem-solving approaches in different situations 	<p>HYC/N0101</p> <p>KA 5 KB 5 SA 3 SB 8, SB 9</p>	<p>Classroom lecture/PPT Session</p>	<p>Computer, Computer Peripherals (Optional), Black/white board, marker/chalk, duster</p>	<p>8 hours</p>
		<p>Practical</p> <ul style="list-style-type: none"> Preparing for basic routine maintenance tasks. Describing basic routine maintenance techniques Carrying out basic routine maintenance tasks. Carrying out basic inspections. 	<p>HYC/N0101</p> <p>PC 17, PC 18, PC 19, PC 20</p>	<p>Practical Sessions/ Video Session</p>	<p>Laptop, projector, sound system, Internet connection</p>	<p>8 hours</p>
		<ul style="list-style-type: none"> Learning physical Science and basic Properties of Materials. Being courteous to the customers Communicating with supervisor and peers Referring anomalies to the line manager Identifying any issues affecting the material, equipment or surroundings Escalating issues that cannot be solved as per the troubleshooting/ company manual 	<p>HYC/N0101</p> <p>KB 6 SA 4, SA 6 SB 10, SB 11</p>	<p>Classroom lecture/PPT Session</p>	<p>Computer, Computer Peripherals (Optional), Black/white board, marker/chalk, duster</p>	<p>8 hours</p>

			Practical <ul style="list-style-type: none"> Identifying the use of basic maintenance hand tools. Demonstrating the use of basic hand tools for maintenance tasks and the production of an artefact. Demonstrating the care of basic maintenance hand tools. 	HYC/N0101 PC 21, PC 22, PC 23	Practical Sessions/ Video Session	Laptop, projector, sound system, Internet connection	8 hours
2	Occupational health and Safety (OHAS)	Occupational health and safety (OHAS) (Session 1)	<ul style="list-style-type: none"> Knowing names (and job titles if applicable), and where to find, all the people responsible for health and safety in a workplace. Knowing Occupational health and safety. Filling up appropriate technical forms, activity logs in required format of the company. 	HYC/N0102 KA 1 KB 1 SA 1	Classroom lecture/PPT Session	Computer, Computer Peripherals (Optional), Black/white board, marker/chalk, dust-er.	8 hours
			Practical <ul style="list-style-type: none"> Using protective clothing/equipment for specific tasks like cutting, welding, repairing in pipeline jobs, well operations, and maintenance inside the installation and work conditions during day to day work and during emergency. Stating the name and location of people responsible for health and Safety for the workplace and escalation matrix 	HYC/N0102 PC 1, PC 2	Practical Sessions/ Video Session	Laptop, projector, sound system, Internet connection	8 hours
		Occupational health and safety (OHAS) (Session 2)	<ul style="list-style-type: none"> Planning names and location of documents that refer to health and safety in the workplace. Being courteous to the customers Making decisions on a suitable course of action or response. 	HYC/N0102 KA 2 SA 4 SB 1	Classroom lecture/PPT Session	Computer, Computer Peripherals (Optional), Black/white board, marker/chalk, dust-er.	8 hours

			<p>Practical</p> <ul style="list-style-type: none"> Identifying job-site hazardous work and state possible causes of risk or possible accidents in the workplace. Carrying out safe working practices while dealing with hazards to ensure the safety of self and others state methods of accident prevention in the work environment of the job role. Identifying common risks and safety SOP in Oil & Gas production area. 	<p>HYC/N0102</p> <p>PC 3, PC 4, PC 7</p>	<p>Practical Sessions/ Video Session</p>	<p>Laptop, projector, sound system, Internet connection</p>	<p>8 hours</p>
		<p>Occupational health and safety (OHAS) (Session 3)</p>	<ul style="list-style-type: none"> Planning SHE and OHS guidelines and regulations as per company's norms Understanding of 5S and Housekeeping. Planning and organizing their own work schedule, work area, tools, equipment and materials to maintain decorum and for improved productivity. 	<p>HYC/N0102</p> <p>KA 6 KA 7 SB 2</p>	<p>Classroom lecture/PPT Session</p>	<p>Computer, Computer Peripherals (Optional), Black/white board, marker/chalk, duster.</p>	<p>8 hours</p>
			<p>Practical</p> <ul style="list-style-type: none"> Stating location of general health and safety equipment in the workplace. Inspecting for faults set up and safely use steps and ladders in general use. Working safely in and around trenches, elevated places and confined areas. 	<p>HYC/N0102</p> <p>PC 5, PC 6, PC 8</p>	<p>Practical Sessions/ Video Session</p>	<p>Laptop, projector, sound system, Internet connection</p>	<p>8 hours</p>

		Fire safety and emergency procedures (Session 4)	<ul style="list-style-type: none"> Knowing risk and impact of not following defined procedures/ work instructions Recognising the hazards and its effects and risk assessment Maintaining proper records as per given format Thinking through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s) 	HYC/N0102 KA 3 KB 2 SA 2 SB 7	Classroom lecture/PPT Session	Computer, Computer Peripherals (Optional),Black/ white board, marker/ chalk, duster.	8 hours
			Practical <ul style="list-style-type: none"> Using the various appropriate fire extinguishers on different types of fires correctly 	HYC/N0102 PC 9	Practical Sessions/ Video Session	Laptop, projector, sound system, Internet connection	8 hours
		Fire safety and emergency procedures (Session 5)	<ul style="list-style-type: none"> Knowing escalation matrix for reporting identified incidents, troubles and/ or emergencies e.g. system failures ,fire and power failures Following standard Operating Procedures in Oil and Gas Safety w.r.t. occupational health & safety Identifying immediate or temporary solutions to resolve delays 	HYC/N0102 KA 4 KB 6 SB 8	Classroom lecture/PPT Session	Computer, Computer Peripherals (Optional),Black/ white board, marker/ chalk,duster.	8 hours
			Practical <ul style="list-style-type: none"> Identifying and follow proactive and reactive fire fighting SOP in Oil & Gas production facilities. Performing Fire Evacuation Steps. 	HYC/N0102 PC 10, PC 11	Practical Sessions/ Video Session	Laptop, projector, sound system, Internet connection	8 hours

		<p>Fire safety and emergency procedures (Session 6)</p> <ul style="list-style-type: none"> Knowing safe Working Practices Liaisoning and coordination skills Identifying sources of support that can be availed of for problem solving for various kind of problems Applying problem-solving approaches in different situations 	<p>HYC/N0102</p> <p>KB 3 SA 5 SB 9 SB 13</p>	<p>Classroom lecture/PPT Session</p>	<p>Computer, Computer Peripherals (Optional), Black/white board, marker/chalk, duster.</p>	<p>8 hours</p>
		<p>Practical</p> <ul style="list-style-type: none"> Preparing incident Reports 	<p>HYC/N0102</p> <p>PC 12</p>	<p>Practical Sessions/ Video Session</p>	<p>Laptop, projector, sound system, Internet connection</p>	<p>8 hours</p>
		<p>Emergencies, rescue and first-aid procedures (Session 7)</p> <ul style="list-style-type: none"> Maintaining records to be maintained and implications of non-maintenance of the same. Comprehending various types of Fire Fighting Equipment & its uses in different conditions Using of different types of Personal Protective Equipment (PPE) Reading and understanding manuals, work orders, health and safety instructions, memos, reports etc Communicating with supervisor and peers Seeking appropriate assistance from other sources to resolve problems Reporting problems that you cannot resolve to appropriate authority Identifying defects in the material and communicate it at the earliest and suggest improvements (if any) in process/material based on experience 	<p>HYC/N0102</p> <p>KA 5 KB 4 KB 5 SA 3 SA 6 SB 10, SB 11, SB 12</p>	<p>Classroom lecture/PPT Session</p>	<p>Computer, Computer Peripherals (Optional), Black/white board, marker/chalk, duster.</p>	<p>8 hours</p>

			<p>Practical</p> <ul style="list-style-type: none"> • Making availability of First Aid box & accessories • Demonstrating how to free a person from electrocution. • Administering appropriate first aid to victims were required eg. in case of bleeding, burns, choking, electric shock, poisoning etc. • Administering appropriate first aid in chemical hazard 	<p>HYC/N0102</p> <p>PC 13, PC 14, PC 15, PC 16</p>	<p>Practical Sessions/ Video Session</p>	<p>Laptop, projector, sound system, Internet connection</p>	<p>8 hours</p>
		Emergencies, rescue and first-aid procedures (Session 8)	<ul style="list-style-type: none"> • Understanding risk Management and reporting. • Communicating in the local language (preferable). • Referring anomalies to the line manager. • Identifying any issues affecting the material, equipment or surroundings • Escalating issues that cannot be solved as per the troubleshooting/ comp manual 	<p>HYC/N0102</p> <p>KB 7 SA 7 SB 14 SB 15 SB 18</p>	<p>Classroom lecture/PPT Session</p>	<p>Computer, Computer Peripherals (Optional), Black/white board, marker/ chalk, duster.</p>	<p>8 hours</p>
			<p>Practical</p> <ul style="list-style-type: none"> • Performing and organize loss minimization or rescue activity during an accident in real or simulated environments • Following SOP in Oil & Gas Drilling Facilities • Using/Proper utilization of breathing apparatus • Ensuring emergency preparation and response 	<p>HYC/N0102</p> <p>PC 17, PC 18, PC 19, PC 20</p>	<p>Practical Sessions/ Video Session</p>	<p>Laptop, projector, sound system, Internet connection</p>	<p>8 hours</p>

3	Work effectively with colleagues and supervisor	Work effectively with colleagues (Session 1)	<ul style="list-style-type: none"> • Risking and impacting of not following defined procedures/ work instructions. • Knowing importance of effective communication in the workplace • Knowing the key elements of active listening • Understanding the value and importance of active listening and assertive communication • Filling up appropriate technical forms, activity logs in required format of the company based on the SOP • Making decisions on a suitable course of action or response Planning and organizing their own work schedule, work area, tools, equipment and materials to maintain decorum and for improved productivity 	<p>HYC/N0103</p> <p>KA 3 KB 3, KB 6, KB 7 SA 1 SB 1 SB 2</p>	Classroom lecture/PPT Session	Computer, Computer Peripherals (Optional), Black/ white board, marker/ chalk, duster.	8 hours
			<p>Practical</p> <ul style="list-style-type: none"> • Receiving accurate information and instructions from the supervisor and fellow workers, getting clarification where required • Passing on information to the authorized persons who require it and within agreed timescale and confirm its receipt. 	<p>HYC/N0103</p> <p>PC 1, PC 2</p>	Practical Sessions/ Video Session	Laptop, projector, sound system, Internet connection	8 hours

		<p>Work effectively with colleagues (Session 2)</p> <ul style="list-style-type: none"> Escalating matrix for reporting identified incidents, troubles and/ or emergencies e.g. system failures ,fire and power failures Knowing the importance of teamwork in organizational and individual success Knowing the barriers to effective communication Maintaining proper records as per given format Thinking through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s) 	<p>HYC/N0103</p> <p>KA 4 KB 4 KB 8 SA2 SB 4</p>	<p>Classroom lecture/PPT Session</p>	<p>Computer, Computer Peripherals (Optional),Black/ white board, marker/ chalk, duster.</p>	<p>8 hours</p>
		<p>Practical</p> <ul style="list-style-type: none"> Giving information to others clearly, at a pace and in a manner that helps them to understand. Displaying helpful behaviour by assisting others in performing tasks in a positive manner, where required and possible. 	<p>HYC/N0103</p> <p>PC 3, PC 4</p>	<p>Practical Sessions/ Video Session</p>	<p>Laptop, projector, sound system, Internet connection</p>	<p>8 hours</p>
		<p>Work effectively with colleagues (Session 3)</p> <ul style="list-style-type: none"> Recordings to be maintained and implications of non-maintenance of the same Knowing the importance of avoiding casual expletives and unpleasant terms while communicating professional circles. Knowing what constitutes disciplined behaviour for a working professional 	<p>HYC/N0103</p> <p>KA 5 KB 10 KB 14 SA 3 SB 5 SB 6</p>	<p>Classroom lecture/PPT Session</p>	<p>Computer, Computer Peripherals (Optional),Black/ white board, marker/ chalk, duster.</p>	<p>8 hours</p>

			<ul style="list-style-type: none"> • Reading and understanding manuals, work orders, health and safety instructions, memos, reports etc. • Identifying immediate or temporary solutions to resolve delays. • Identifying sources of support that can be availed of for problem solving for various kind of problems. 				
			<p>Practical</p> <ul style="list-style-type: none"> • Consulting with and assist others to maximize effectiveness and efficiency in carrying out tasks • Displaying appropriate communication etiquette while working 	<p>HYC/N0103 PC 5, PC 6</p>	<p>Practical Sessions/ Video Session</p>	<p>Laptop, projector, sound system, Internet connection</p>	<p>8 hours</p>
		<p>Work effectively with supervisors (Session 4)</p>	<ul style="list-style-type: none"> • Following legislation, standards, policies, and procedures followed in the company relevant to own employment and performance conditions. • Knowing the user/ individual on the job needs to know and understand: • Knowing various categories of people that one is required to communicate and coordinate with in the organization • Being courteous to the Peers , Juniors , Superiors and customers • Seeking appropriate assistance from other sources to resolve problems • Reporting problems that you cannot resolve to appropriate authority 	<p>HYC/N 0103 KA 1 KB 1, KB 2 SA 4 SB 7, SB 8</p>	<p>Classroom lecture/PPT Session</p>	<p>Computer, Computer Peripherals (Optional),Black/white board, marker/ chalk, duster.</p>	<p>8 hours</p>

			<p>Practical</p> <ul style="list-style-type: none"> • Displaying active listening skills while interacting with others at work. • Using appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism. 	<p>HYC/N0103 PC 7, PC 8</p>	<p>Practical Sessions/ Video Session</p>	<p>Laptop, projector, sound system, Internet connection</p>	<p>8 hours</p>
		<p>Work effectively with supervisors (Session 5)</p>	<ul style="list-style-type: none"> • Reporting structure, inter-dependent functions, lines and procedures in the work area • Knowing various components of effective communication • Understanding the importance of tone and pitch in effective communication. • Liaisoning and coordination skills. • Identifying defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience • Applying problem-solving approaches in different situations 	<p>HYC/N0103 KA 2 KB 5, KB 9 SA 5 SB 9, SB 10</p>	<p>Classroom lecture/PPT Session</p>	<p>Computer, Computer Peripherals (Optional),Black/white board, marker/ chalk, duster.</p>	<p>8 hours</p>
			<p>Practical</p> <ul style="list-style-type: none"> • Demonstrating responsible and disciplined behaviours at the workplace. • Demonstrating Time Management Skills. 	<p>HYC/N0103 PC 9, PC 10</p>	<p>Practical Sessions/ Video Session</p>	<p>Laptop, projector, sound system, Internet connection</p>	<p>8 hours</p>

		Work effectively with supervisors (Session 6)	<ul style="list-style-type: none"> Following SHE and OHS guidelines and regulations as per company's norms. Learning how poor communication practices can disturb people, environment and cause problems for the employee, the employer and the customer. Knowing the importance of ethics for professional success. Knowing the importance of discipline for professional success. Referring anomalies to the line manager Identifying any issues affecting the material, equipment or surroundings Escalating issues that cannot be solved as per the troubleshooting/ company manual 	HYC/N0103 KA 6 KB 11, KB 12, KB 13 SB 11, SB 12	Classroom lecture/PPT Session	Computer, Computer Peripherals (Optional), Black/white board, marker/ chalk, duster.	8 hours
			<p>Practical</p> <ul style="list-style-type: none"> Understanding Expectation Management Demonstrating Commitment to work, adhering to SOPs, Honesty etc. 	HYC/N0103 PC 11, PC 12	Practical Sessions/ Video Session	Laptop, projector, sound system, Internet connection	8 hours
4	Soft Skills	Session 1 Developing Soft skills	<ul style="list-style-type: none"> Learning personal Grooming Learning personality development 	Bridge Module	Classroom Lecture/PPT Practical demonstration	White board, pen, laptop, projector	6 hours
		Session 2 Developing Soft skills	<ul style="list-style-type: none"> Learning Interview handling Working in team 		Classroom Lecture/PPT Practical demonstration	White board, pen, laptop, projector	
		Session 3 Developing Soft skills	<ul style="list-style-type: none"> Learning customer Handling Learning time management 		Classroom Lecture/PPT Practical demonstration	White board, pen, laptop, projector	

5	Communi- cation Skills	Session 1 Implemen- tation of commu- nication skills	<ul style="list-style-type: none"> • Reading, Writing and Oral communication • Learning courteous behaviour 	Bridge Module	Classroom Lecture/PPT Practical demonstra- tion	White board, pen, laptop, projector	6 hours
		Session 2 Implemen- tation of commu- nication skills	<ul style="list-style-type: none"> • Knowing problem solving techniques • Learning positive Body language 		Classroom Lecture/PPT Practical demonstra- tion	White board, pen, laptop, projector	
Total Duration							360 Hours