



BLOCK SYLLABUS

&

DETAILED SYLLABUS

**(MOTOR GRADER OPERATOR)
(3 MONTHS DURATION)**

**APPLIED TECHNOLOGIES INSTITUTE &
DRIVING SCHOOL NLC DINA**

BLOCK SYLLABUS

1. Duration

Duration of Course : 13 Weeks
Total Training Hours : 364 hrs
: 28 hrs per Week

2. Training Methodology

Serial	Detail	Percentage	Total Hours
1	Theory	20%	72
2	Practical	80%	292
Total Training Hrs			364

TRAINING OBJECTIVE

This course has been designed to prepare students for employment in / out side Pakistan in the field of transport / logistics. After this course students can do the following:-

1. Operate the Construction Machinery skillfully & take necessary safety measures.
2. Observe personal hygiene, tidiness, wear protective clothing. Do first aid treatment
3. Handle tools & equipment
4. Know the handling & operation of Construction Machinery
5. Know the major components of Machinery & their function
6. Perform routine maintenance & periodic servicing
7. Character building of the operator.

SKILL PROFICIENCY

After the completion of course the trainees will be able to:-

1. Operate equipment efficiently with all essential implements by observing necessary precautions & driving rules.
2. Perform skillfully field operation.
4. Select & use of different tools & equipment.
5. Able to remove minor faults.
6. Perform routine maintenance & periodic servicing.
7. Know the procedure to maintain different systems of machine.

SCHEME OF STUDIES				
Sr. No	Modules	Theory	Practical	Total Hours
1	History of Construction Machinery	2	0	2
2	Health & Safety	11	0	11
3	Introduction of Motor Grader and its Different Parts, Use of Different Tools / Equipment	39	0	39
4	Operate Motor Grader	0	265	265
5	Communication Skills required for an Operator	4	9	13
6	Motor Grader Maintenance	7	0	7
7	Revision & Practical Test	9	18	27
Total		72	292	364

DETAIL BLOCK SYLLABUS (OVERVIEW OF THE PROGRAM)					
S. No.	Topic		Theory (Hrs)	Practical (Hrs)	Total (Hrs)
1	Introduction				
	1.1	History of Construction Machinery, General Introduction and Knowledge etc.	2	-	2
2	Health & Safety				
	2.1	General Safety on Site & work Ethics action at Accident Site & First Aid Application	10		10
	2.2	Effects of drugs on life of Operator in particular and Public in general	1		1
3	Introduction of Motor Grader, its Different Parts & Use of Different Tools / Equipment				
	3.1	Introduction Of Motor grader, Basic Operation and Gauges	4	-	4
	3.2	Working Speeds, Blade Degree Function	4	-	4
	3.3	Steering System of Motor Grader	4	-	4
	3.4	System of Diesel Engine	4	-	4
	3.5	Cooling and Fuel System and Lubrication System	5	-	5
	3.6	Kinds of Tyres and Types of Maintenance	5	-	5
	3.7	Types of Power Train and Transmission	7	-	7
	3.8	Introduction of Battery and Electrical System	3	-	3
	3.9	Introduction of Hydraulic System	3	-	3
4	Operate Motor Grader				
	4.1	Basic Motor Grader Operation	-	30	30
	4.2	Starting, Steering & Parking Operation	-	25	25
	4.3	Level Function of Motor Grader	-	50	50
	4.4	Blade Operation of Motor Grader	-	160	160

5	Communication Skills required for an Operator				
	5.1	Oral & Written Communication with Concerns, Conduct of driver and social responsibility / behavior	4	9	13
6	Motor Grader Maintenance				
	6.1	General Maintenance of Motor Grader	3	-	3
	6.2	Air Intake and Exhaust System Maintenance	4	-	4
7	Revision & Practical Test				
	7.1	Revision	5	-	5
	7.2	Written Test	4	-	4
	7.3	Practical Test	-	18	18
Total			72	292	364