INSTITUT KESELAMATAN DAN KESIHATAN PEKERJAAN NEGARA



KURIKULUM KURSUS

COURSE CURRICULUM

TEL: 03 - 8911 3800 FAX: 03 - 8926 3900

URL: www.niosh.com.my



: MCO

COURSE TITLE : Mobile Crane Operator COURSE CODE

COURSE DURATION: 5-day(s) / 36.50-hour(s) COURSE LEVEL: Intermediate

HRDCORP SCHEME : Claimable COURSE CATEGORY : Competency

COURSE FEE: RM 1,986.79 (inclusive of 8% SST)

1. OBJECTIVE(S):

At the end of the course, the participant will be able to:

- i. Identify and explain the function of all major crane components and assemblies
- ii. Explain the legal requirement related to mobile crane operation
- iii. Understand and use operational aids and safety devices like load moment indicator, load chart, boom angle indicator, boom length indicators, crane level indicator and outrigger.
- iv. Set up the crane and perform operation mobile cranes safely
- v. Determine hazardous in mobile crane operations works
- vi. Perform and document the crane inspection procedure

2. TARGET GROUP(S):

- i. OSH Practitioners.
- ii. Engineers/Executives
- iii. Lifting operations personnel and riggers aspiring to become Mobile Crane Operator
- iv. Interested parties

3. ENTRY REQUIREMENT(S):

- i. Malaysian citizen; and
- ii. Physically and mentally fit; and
- iii. Able to perform basic mathematical calculation; and
- iv. Able to read and write either Bahasa or English

4. TOPIC(S):

- i. Legislative Requirement
- ii. Introduction to Mobile Cranes
- iii. Personnel and General Safety
- iv. Calculation on angle factor and lifting (volume area, weight and density)
- v. Slinging Methods
- vi. Signals and Communications
- vii. Lifting Appliances

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INSTITUT KESELAMATAN DAN KESIHATAN PEKERJAAN NEGARA



NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH

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- viii. Load Chart
- ix. Pre-Operation and post-operation Inspections
- x. Practical Training
- xi. Turn off the crane (Post Check)

5. LIST OF REFERENCE BOOK(S):

- i. Akta Keselamatan dan Pekerjaan 1994 (Akta 514)
- ii. Akta Kilang dan Jentera 1967 (Akta 139)
- iii. Guidelines for Hazard Identification, Risk Assessment and Risk Control (HIRARC), 2008
- iv. Guidelines For Public Safety & Health at Construction Sites (1st revision 2007) Department of Occupational Safety and Health Malaysia
- v. Hoisting and rigging safety Manual, Infrastructure Health & Safety Association. Canada. 2012
- vi. Manual Book Mobile Crane

6. LIST OF TEACHING AID(S):

- i. LCD projector.
- ii. Computer.
- iii. White board with accessories.
- iv. Flip chart with accessories.
- v. Lifting Equipment
- vi. Mobile Crane Accessories

7. LIST OF CLASSROOM ACTIVITIES:

- i. Lecture.
- ii. Discussion.
- iii. Practical.

Note: Participant is required to bring along Personal Protective Equipment (E.g. Safety Helmet and Safety Boot) for the training session.

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COURSE SCHEDULE			
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COURSE TITLE: MOBILE CRANE OPERATOR

DAY ONE

TIME	HOUR	TOPICS	TRAINER / FACILITATOR
0830 - 0900	0.50	Registration and Course Briefing	NIOSH
0900 - 1030	1.50	Legislative Requirement	
1030 - 1045	0.25	MORNING TEA BREAK	
1045 - 1300	2.25	Introduction to Mobile Cranes	
1300 - 1400	1.00	LUNCH	
1400 - 1530	1.50	Personnel and General Safety	
1530 - 1545	0.25	AFTERNOON TEA BREAK	
1545 - 1730	1.75	Slinging Methods	
	7.00	END OF DAY ONE	

DAY TWO

TIME	HOUR	TOPICS	TRAINER / FACILITATOR
0830 - 1030	2.00	Load Chart	
1030 - 1045	0.25	MORNING TEA BREAK	
1045 - 1300	2.25	Continuous	
1300 - 1400	1.00	LUNCH	
1400 - 1530	1.50	Calculation	
1530 - 1545	0.25	AFTERNOON TEA BREAK	
1545 - 1730	1.75	Signals and Communications	
	7.50	END OF THE COURSE	

COURSE SCHEDULE NIOSH MALAYSIA



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DAY THREE

TIME	HOUR	TOPICS	TRAINER / FACILITATOR
0830 - 1030	2.00	Practical Training: • Pre-operational checks	
1030 - 1045	0.25	MORNING TEA BREAK	
1045 - 1300	2.25	Practical Training: Operating procedures and precautions	
1300 - 1400	1.00	LUNCH	
1400 - 1530	1.50	Practical Training: • Proper slewing and hoisting	
1530 - 1545	0.25	AFTERNOON TEA BREAK	
1545 - 1730	1.75	Practical Training: Proper slewing and hoistingMastering mobile crane operationsPost-operational checks	
	7.50	END OF THE COURSE	

DAY FOUR

TIME	HOUR	TOPICS	TRAINER / FACILITATOR
0830 - 1030	2.00	Practical Training: • Pre-operational checks	
1030 - 1045	0.25	MORNING TEA BREAK	
1045 - 1300	2.25	Practical Training: • Operating procedures and precautions	
1300 - 1400	1.00	LUNCH	
1400 - 1530	1.50	Practical Training: • Proper slewing and hoisting	
1530 - 1545	0.25	AFTERNOON TEA BREAK	
1545 - 1730	1.75	Practical Training: Proper slewing and hoistingMastering mobile crane operationsPost-operational checks	
	7.50	END OF THE COURSE	

COURSE SCHEDULE NIOSH MALAYSIA



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DAY FIVE

TIME	HOUR	TOPICS	TRAINER / FACILITATOR
0830 - 0900	0.50	Registration of Attendance	NIOSH
0900 – 0930	0.50	Briefing Session by Assessor	NIOSH
0930 - 1030	1.00	Assessment	NIOSH
1030 - 1045	0.25	MORNING TEA BREAK	
1045 - 1300	2.25	Assessment	NIOSH
1300 - 1400	1.00	LUNCH	
1400 - 1530	1.50	Assessment	NIOSH
1530 - 1545	0.25	AFTERNOON TEA BREAK	
1545 - 1730	1.75	Housekeeping and Closing Ceremony	NIOSH
	7.00	END OF THE COURSE	

COURSE SCHEDULE NIOSH MALAYSIA