

## **Annex 10 Courses and Hours of Safety and Health Education and Trainings specified for Operators of Dangerous Machinery**

- I. Courses and hours of safety and health education and trainings specified for operators of fixed cranes with hoisting capacity above 3 tons and stacking cranes with hoisting capacity above 1 ton (38 hours)

No.	Course Name	Hour(s)
1	Crane-related regulations	2 hours
2.	Types and functions of fixed cranes	3 hours
3.	Structure and safety devices of fixed cranes	3 hours
4	Related knowledge of prime motor and electric	3 hours
5	Related mechanical knowledge of hoisting and hanging	2 hours
6	Safety operation guidelines of hoisting and hanging	4 hours
7	Accident prevention and response of hoisting and hanging	3 hours
8	Self-inspection and inspection-point maintenance of fixed crane	2 hours
9	Practicum of crane operation, hanging operation and command	16 hours

Notes:

1. Skills practicum for ground operation, on-board operation and overhanging types of fixed crane shall use equivalent types of fixed cranes and conduct operations at skills practicum sites.
2. The operation training shall be divided by groups, less than 15 persons a group, for practicum. It may be conducted by groups at the same time or by sequence.

II. Courses and hours of safety and health education and trainings  
 specified for operators of mobile cranes with hoisting capacity above  
 3 tons (38 hours)

No.	Course Name	Hour(s)
1	Crane-related regulations	2 hours
2.	Types and functions of mobile cranes	3 hours
3.	Structure and safety devices of mobile cranes	3 hours
4	Related knowledge of internal combustion engine, hydraulic drive device and electricity	3 hours
5	Related mechanical knowledge of hoisting and hanging	2 hours
6	Safety operation guidelines of hoisting and hanging	4 hours
7	Accident prevention and response of hoisting and hanging	3 hours
8	Self-inspection and inspection-point maintenance of mobile crane	2 hours
9	Practicum of crane operation, hanging and command	16 hours

Notes:

1. Skills practicum for fixed or flexible overhanging types of mobile crane shall use equivalent types of mobile cranes and conduct operation at skills practicum sites.
2. The operation training shall be divided by groups, less than 15 persons a group, for practicum. It may be conducted by groups at the same time or by sequence.

III. Courses and hours of safety and health education and trainings specified for operators of derrick cranes with hoisting capacity above 3 tons (38 hours)

No.	Course Name	Hour(s)
1	Crane-related regulations	2 hours
2.	Types and functions of derrick cranes	3 hours
3.	Structure and safety devices of derrick cranes	3 hours
4	Related knowledge of prime motor and electric	3 hours
5	Related mechanical knowledge of hoisting and hanging	2 hours
6	Safety operation guidelines of hoisting and hanging	4 hours
7	Accident prevention and response of hoisting and hanging	3 hours
8	Self-inspection and inspection-point maintenance of derrick crane	2 hours
9	Practicum of derrick crane operation, hanging and command	16 hours

Note: The operation practicum shall be divided by groups, less than 15 persons per group. It may be conducted by groups at the same time or by sequence.

IV. Courses and hours of safety and health education and trainings specified for operators of construction elevators with height of lead rail or elevating route over 20 meters (21 hours)

No.	Course Name	Hour(s)
1	Constructive elevator-related regulations	1 hour
2.	Types and functions of construction elevators	3 hours
3.	Related knowledge of prime motor and electric	2 hours
4	Safety operation guidelines	3 hours

5	Accident prevention and response of construction elevators	2 hours
6	Self-inspection and inspection-point maintenance of construction elevators	2 hours
7	Construction elevator operation practicum	8 hours

Note: The operation practicum shall be divided by groups, less than 15 persons per group. It may be conducted by groups at the same time or by sequence.

V. Courses and hours of safety and health education and trainings specified for operators of gondolas (26 hours)

No.	Course Name	Hour(s)
1	Hoisting cage-related regulations	2 hours
2.	Types and functions of gondolas	3 hours
3.	Structure and safety devices of gondolas	2 hours
4	Fixing methods and safety devices of gondolas	3 hours
5	Safety operation guidelines of gondolas	3 hours
6	Accident prevention and response of gondola	3 hours
7	Self-inspection and inspection-point maintenance of gondolas	2 hours
8	Gondolas operation practicum	8 hours

Note: The operation practicum shall be divided by groups, less than 15 persons per group. It may be conducted by groups at the same time or by sequence.