

Through a combination of targeted training and experience, an appointed person will be able to:

Legislative and regulative	<ul style="list-style-type: none">• Explain the duties and responsibilities of: an Appointed Person, a Crane Supervisor, a Crane Operator, a Slinger, a Signaller, a crane erector, and maintenance personnel• State basic requirements of legislation, regulations, and Codes of Practice that relate to all types of lifting duties• Explain maintenance, inspection, thorough examination and testing requirements for lifting equipment and accessories• State requirements that allow safe site access and egress for typical lifting equipment• Explain additional requirements for loads to be lifted from height
Lifting equipment (cranes)	<ul style="list-style-type: none">• Explain the function and use off, and use information provided by, RCIs and anti-collision systems• Describe setting up, erection, levelling and dismantling requirements for different types of lifting equipment and lifts
Lifting accessories	<ul style="list-style-type: none">• List different types of lifting accessories and explain typical applications• Identify and explain relevant information relating to different types of lifting accessories i.e. markings, certificates and thorough examination reports, etc.• Verify sling sizes and angles• Explain slinging techniques for given loads including balanced, unbalanced and loose• Verify appropriate lifting accessories for given types of loads in accordance with a given method statement• Confirm weights and centres of gravity for difference types of loads in accordance with a given method statement
Communication	<ul style="list-style-type: none">• Describe and demonstrate different types of communication methods for lifting purposes• Communicate the lift plan information to others involved in a lifting operation• Report and explain positive and negative aspects of a typical lift following the operation to the Appointed Person



Outcomes (*continued*)

Supervising	<ul style="list-style-type: none">• Identify potential hazards and unsafe lifting practices using given lifting scenarios• Evaluate and explain how environmental factors and the surrounding area external to the lift zone can affect the planned lifting operation• Prepare an area, with exclusion zones, from given lifting plans, ensuring safe access / egress routes for before, during and after the lift• Mark the position of lifting equipment according to a given plan• Verify potential proximity and underground hazards from given plans and drawings• Confirm personnel requirements to meet the lift plan• Mark the position of lifting accessories and prepare load spreading systems as required• Confirm lifting equipment configurations from given plans• Control a lifting operation using a given lifting plan
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Crane / Lifting operations supervisor – A62

Learning for CPCS

Syllabus



AN NOCN JOB CARD

Learning outcome	Course content E – Explain D = Demonstrate A = Activity	
<ul style="list-style-type: none"> Explain the duties, responsibilities and limitations of: an Appointed Person, a Crane Supervisor, a Crane Co-ordinator, a Crane Operator, a Slinger, a Signaller, a crane erector, and maintenance personnel 	<ul style="list-style-type: none"> Contents of relevant sections of BS 7121 Parts 1 to 5, LOLER 98 & PUWER 98, and how they apply to each of the designated persons and their duties 	<ul style="list-style-type: none"> E
<ul style="list-style-type: none"> State requirements of legislation, regulations, and Codes of Practice that relate to all types of lifting duties 	<ul style="list-style-type: none"> An overview of: Health & Safety at Work Act 74; The Management of H & S Regs 99; ACOPs; BS 7121 Parts 1 to 5; LOLER 98; PUWER 98; BS 7212; BS 8460 	<ul style="list-style-type: none"> E
<ul style="list-style-type: none"> Explain maintenance, inspection, thorough examination and testing requirements for lifting equipment and accessories 	<ul style="list-style-type: none"> Relevant sections of LOLER 98 & BS 7121 Part 2 Various Examination Reports & Test Certificates, both in date and out of date. D Areas of importance when checking certificates as a CLOS 	<ul style="list-style-type: none"> E D E
<ul style="list-style-type: none"> State requirements that allow safe site access and egress for typical lifting equipment 	<ul style="list-style-type: none"> Examine typical crane widths, sizes, weights, transportation methods and turning circles, with known site plans, with particular reference to confined areas 	<ul style="list-style-type: none"> A
<ul style="list-style-type: none"> Explain additional requirements for loads to be lifted from height 	<ul style="list-style-type: none"> Extracts from BS 7121 requirements for lifting from height – with appropriate dangers and implications to crane safety 	<ul style="list-style-type: none"> E
<ul style="list-style-type: none"> Describe setting up, erection, levelling and dismantling requirements for different types of lifting equipment and lifts (see Note 1) 	<ul style="list-style-type: none"> Requirements of BS 7121 Parts 1 to 5, LOLER 98 & PUWER 98 for erecting/dismantling a crane and the importance of Firm Level Standing for: mobile (Inc. rough terrain, truck type, truck mounted, all purpose, all terrain etc.) plus crawlers, fixed base, tower, yard, low headroom, lorry/loader/knuckle boom, forklifts, MEWPS, excavators (used as cranes) Hoists Overview of the Work at Height Regulations Aug 2005 	<ul style="list-style-type: none"> E

Note 1: Instructors must ensure that all crane/lifting equipment types listed (and those that candidates may deal with) are thoroughly covered.

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Learning for CPCS

Syllabus (continued)



Learning outcome	Course content E – Explain D = Demonstrate A = Activity	
<ul style="list-style-type: none"> List different types of lifting accessories and explain typical applications 	<ul style="list-style-type: none"> Differing types of lifting accessories and uses Limitations of use and de-rating due to application as applicable Other types of lifting frames as required 	<ul style="list-style-type: none"> D E D
<ul style="list-style-type: none"> Identify and explain relevant information relating to different types of lifting accessories i.e. markings, certificates and thorough examination reports, etc. 	<ul style="list-style-type: none"> Inspecting lifting accessories Extraction of relevant information from the equipment information tags Differences between SWL/WLL/rated capacity Extract relevant information using test certificates and thorough examination reports 	<ul style="list-style-type: none"> A A E A
<ul style="list-style-type: none"> Verify sling sizes and angles 	<ul style="list-style-type: none"> Identification of sling sizes, with angles & various computations of slings as required for load size i.e. long loads etc. 	<ul style="list-style-type: none"> A
<ul style="list-style-type: none"> Explain slinging techniques for given loads including balanced, unbalanced and loose (see Note 2) 	<ul style="list-style-type: none"> Attaching and detaching different lifting accessories to loads, correct and incorrect slinging techniques and the use of brothers & shortening clutches for loads with varying centres of gravity 	<ul style="list-style-type: none"> A
<ul style="list-style-type: none"> Verify appropriate lifting accessories for given types of loads in accordance with a given method statement 	<ul style="list-style-type: none"> Select lifting accessories for a given range of loads. Extract & confirm lifting accessories in accordance with typical method statements 	<ul style="list-style-type: none"> A

Note 2: Each candidate must attach and detach all listed types of loads using a variety of lifting accessories. A lifting device must be used which has a hook that can be raised and lowered, allowing each load to freely suspend

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Learning for CPCS

Syllabus (continued)



AN NOCN JOB CARD

Learning outcome	Course content E – Explain D = Demonstrate A = Activity	
<ul style="list-style-type: none"> • Confirm weights and centres of gravity for different types of loads in accordance with a given method statement 	<ul style="list-style-type: none"> • Calculate weights and centres of gravity using known formulae • Extract & confirm net weight, gross weight and centre of gravity from typical method statements 	<ul style="list-style-type: none"> • A
<ul style="list-style-type: none"> • Describe and demonstrate different types of communication methods for lifting purposes 	<ul style="list-style-type: none"> • Signals from BS 7121 (manual & radio). Radio use and protocol. Other options of relaying standard signals • Advantages and limitations of different communication types 	<ul style="list-style-type: none"> • D • E
<ul style="list-style-type: none"> • Communicate the lift plan information to others involved in a lifting operation 	<ul style="list-style-type: none"> • Role play in explaining the lift plan to others involved in the lift i.e. any proximity hazards, boom length, Radii, boom deflection, how the crane is rigged, lift and lay down area, why the specific code was selected and crane set up according to manufacturer's instructions, environmental conditions etc. 	<ul style="list-style-type: none"> • A
<ul style="list-style-type: none"> • Report and explain positive and negative aspects of a typical lift following the operation to the Appointed Person 	<ul style="list-style-type: none"> • Compile a report on lift undertaken highlighting positive & negative aspects of the lift (role play). Ways to improve the lift procedures i.e. revised risk assessment/method statement etc. Procedures to amend lift plan 	<ul style="list-style-type: none"> • A
<ul style="list-style-type: none"> • Identify potential hazards and unsafe lifting practices using given lifting scenarios 	<ul style="list-style-type: none"> • Identify the proximity hazards from examples of lifts using existing drawings/plans. Highlight hazards with possible solutions (if any) to the lift 	<ul style="list-style-type: none"> • A

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Learning for CPCS

Syllabus (continued)



AN NOCN JOB CARD

Learning outcome	Course content E – Explain D = Demonstrate A = Activity	
<ul style="list-style-type: none"> Evaluate and explain how environmental factors and the surrounding area external to the lift zone can affect the planned lifting operation 	<ul style="list-style-type: none"> Explain restrictions imposed on the actual lift plan by being near <ul style="list-style-type: none"> (a) a railway (b) an airport (c) a hospital (d) city centre location (e) dockside location 	<ul style="list-style-type: none"> A
<ul style="list-style-type: none"> Prepare an area, with exclusion zones, from given lifting plans, ensuring safe access / egress routes for before, during and after the lift 	<ul style="list-style-type: none"> Identify and deal with exclusion zones, access/egress points etc. from given lifting plans 	<ul style="list-style-type: none"> A
<ul style="list-style-type: none"> Mark the position of lifting equipment according to a given plan 	<ul style="list-style-type: none"> Extract and use information from a given lift plan and ascertain a) if the lift is possible b) if there is adequate FOS/down-rating c) if there is sufficient height d) how the crane will be set up for the lift Procedures if lift plan needs to be amended by contacting AP (CS prohibited from amending plan) 	<ul style="list-style-type: none"> A E
<ul style="list-style-type: none"> Verify potential proximity and underground hazards from given plans and drawings 	<ul style="list-style-type: none"> Identify the proximity hazards from examples of lifts using existing drawings/plans. Highlight hazards with possible solutions (if any) to the lift 	<ul style="list-style-type: none"> A
<ul style="list-style-type: none"> Confirm personnel requirements to meet the lift plan 	<ul style="list-style-type: none"> Extract and use information from given lift plans. Identify number and type of personnel, PPE, certification, permits of work etc. 	<ul style="list-style-type: none"> A

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Learning for CPCS

Syllabus (continued)



AN NOCN JOB CARD

Learning outcome	Course content E – Explain D = Demonstrate A = Activity	
• Mark the position of lifting accessories and prepare load spreading systems as required	• Apply information from a given lift plan and ascertain correct lifting accessories for load	• D
• Confirm lifting equipment configurations from given plans	• Apply information from a given lift plan and ascertain correct configuration for load from given plan	• D
• Control a lifting operation using a given lifting plan	• Apply information from a given lift scenario	• D

Note: The listed training content should not be considered exhaustive and subjects may be added to reflect the individuals' working environment.

Additional items to be covered within the syllabus:

CIRIA recommendations as detailed in C703 – Crane Stability on Site Version 2 and C654 – Tower Crane stability.

Crane requirement: A mobile crane, or access to a mobile crane must be made available during the course, so that candidates can observe and evaluate certification requirements, maintenance and setting up procedures etc.

References and other material: Items listed are not exhaustive and should be considered the minimum. Instructors must provide all relevant resources and material to ensure effective dissemination of information.

Current recommended references and other material
ACOP Safe use of Cranes
BS 7121 Parts 1 to 5
CPA Best Practice guide
Drawings/plans from actual or simulated lifts
HASWA 74
LEEA Inspection manual
LEEA Slings/Lifting manual
Lift plans and lift accessories certification
Lifting equipment and accessories
Load charts and applicable codes for different rigging applications
LOLER 98
Manufacturer's specifications
Materials on why /how accidents happen
Method statements
PPE Regulations
PUWER 98
Selection of applicable lifting accessories (with the exceptions of lifting frames or other specialised equipment)
Selection of certificates for cranes
Selection of loads including balanced, unbalanced and bundled/loose
The Management of Health & Safety Regulations 92
Videos of crane accidents
Working at Height Directive Aug 2005

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Duration / Ratios

To allow effective learning, at least 27 hours of training must have been completed for this category. Candidates must be profiled to establish learning needs. Course durations should be of a length to ensure the learning outcomes are met.

To allow effective learning, the listed candidate / machine / instructor ratio is the maximum recommended for this category

6 candidates : 1 instructor

Category

Category description and types

CPCS defines a category as an item of plant or equipment used within the construction or allied industries and worked in accordance with the manufacturer's basic design or legislative guidance. This category is defined as a duty of an individual supervising lifting operations.

Duties

The Crane/Lifting Operations Supervisor is responsible for ensuring that a lifting operation is properly supervised and carried out in a safe manner in accordance with a method statement. A full description of the duties and responsibilities of a Crane/Lifting Operations Supervisor can be found in the Approved Code of Practice for the Lifting Operations and Lifting Equipment Regulations 2014 (L113) and BS 7121 Part 1:2016.