



Computer Usage Risk Assessment Form

4th Year Project Work

This risk assessment comprises the Health & Safety Executive's Workstation Checklist, additional guidance for users of laptop computers and supplementary questions required by the Department of Engineering Science

You must complete this risk assessment if you regularly use your computer during your project work for continuous periods of one hour or more.

You do not need to complete this risk assessment if you use your computer only occasionally or for short periods. If in doubt please contact the Department Safety Officer for advice

If your computer use is solely with a laptop go straight to the laptop-specific guidance and supplementary questions starting on PDF page 10. If you use a combination of desktop and laptop computers you should complete the whole of this form and start at the beginning.

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Display screen equipment (DSE) workstation checklist



This is a web-friendly version of *Display screen equipment (DSE) workstation checklist* published 05/13

Workstation location and number (if applicable): 
User:
Checklist completed by:
Assessment checked by:
Any further action needed:	Yes/No
Follow-up action completed on:	

The following checklist can be used to help you complete a risk assessment and comply with the Schedule to the Health and Safety (Display Screen Equipment) Regulations 1992 as amended by the Health and Safety (Miscellaneous Amendments) Regulations 2002.

The questions and ‘Things to consider’ in the checklist cover the requirements of the Schedule. If you can answer ‘Yes’ in the second column against all the questions, having taken account of the ‘Things to consider’, you are complying. You will not be able to address some of the questions and ‘Things to consider’, eg on reflections on the screen, or the user’s comfort, until the workstation has been installed. These will be covered in the risk assessment you do once the workstation is installed.

Work through the checklist, ticking either the ‘Yes’ or ‘No’ column against each risk factor:

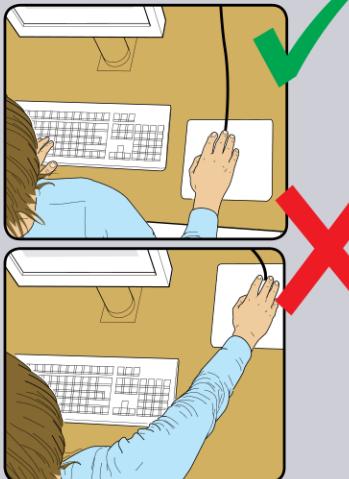
- ‘Yes’ answers require no further action.
- ‘No’ answers will require investigation and/or remedial action by the workstation assessor. They should record their decisions in the ‘Action to take’ column. Assessors should check later that actions have been taken and have resolved the problem.

Remember, the checklist only covers the workstation and work environment. You also need to make sure that risks from other aspects of the work are avoided, eg by giving users health and safety training, and providing for breaks or changes of activity. For more advice on these see *Working with display screen equipment (DSE): A brief guide*.

Risk factors	Tick answer		Things to consider	Action to take
	Yes	No		

1 Keyboards

Is the keyboard separate from the screen?	<input checked="" type="checkbox"/>	This is a requirement, unless the task makes it impracticable (eg where there is a need to use a portable).	
Does the keyboard tilt?	<input checked="" type="checkbox"/>	Tilt need not be built in.	
Is it possible to find a comfortable keying position?		<p>Try pushing the display screen further back to create more room for the keyboard, hands and wrists.</p>    	
Does the user have good keyboard technique?	<input checked="" type="checkbox"/>	<p>Training can be used to prevent:</p> <ul style="list-style-type: none"> ■ hands bent up at the wrist; ■ hitting the keys too hard; ■ overstretching the fingers. 	
Are the characters clear and readable?	<input checked="" type="checkbox"/>	<p>Keyboards should be kept clean. If characters still can't be read, the keyboard may need modifying or replacing.</p> <p>Use a keyboard with a matt finish to reduce glare and/or reflection.</p>	

Risk factors	Tick answer		Things to consider	Action to take
	Yes	No		
2 Mouse, trackball etc				
Is the device suitable for the tasks it is used for?	<input checked="" type="checkbox"/>		<p>If the user is having problems, try a different device. The mouse and trackball are general-purpose devices suitable for many tasks, and available in a variety of shapes and sizes. Alternative devices such as touch screens may be better for some tasks (but can be worse for others).</p>	
Is the device positioned close to the user? 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Most devices are best placed as close as possible, eg right beside the keyboard.</p> <p>Training may be needed to:</p> <ul style="list-style-type: none"> ■ prevent arm overreaching; ■ encourage users not to leave their hand on the device when it is not being used; ■ encourage a relaxed arm and straight wrist. 	
Is there support for the device user's wrist and forearm?	<input checked="" type="checkbox"/>		<p>Support can be gained from, for example, the desk surface or arm of a chair. If not, a separate supporting device may help.</p> <p>The user should be able to find a comfortable working position with the device.</p>	
Does the device work smoothly at a speed that suits the user?	<input checked="" type="checkbox"/>		<p>See if cleaning is required (eg of mouse ball and rollers).</p> <p>Check the work surface is suitable. A mouse mat may be needed.</p>	
Can the user easily adjust software settings for speed and accuracy of pointer?	<input checked="" type="checkbox"/>		<p>Users may need training in how to adjust device settings.</p>	

Risk factors	Tick answer		Things to consider	Action to take
	Yes	No		

3 Display screens

Are the characters clear and readable?	<input checked="" type="checkbox"/>	Make sure the screen is clean and cleaning materials are available. Check that the text and background colours work well together.	
			
Is the text size comfortable to read?	<input checked="" type="checkbox"/>	Software settings may need adjusting to change text size.	
Is the image stable, ie free of flicker and jitter?	<input checked="" type="checkbox"/>	Try using different screen colours to reduce flicker, eg darker background and lighter text. If there are still problems, get the set-up checked, eg by the equipment supplier.	
Is the screen's specification suitable for its intended use?	<input checked="" type="checkbox"/>	For example, intensive graphic work or work requiring fine attention to small details may require large display screens.	
Are the brightness and/or contrast adjustable?	<input checked="" type="checkbox"/>	Separate adjustment controls are not essential, provided the user can read the screen easily at all times.	
Does the screen swivel and tilt?	<input checked="" type="checkbox"/>	Swivel and tilt need not be built in; you can add a swivel and tilt mechanism. However, you may need to replace the screen if: <ul style="list-style-type: none"> ■ swivel/tilt is absent or unsatisfactory; ■ work is intensive; and/or ■ the user has problems getting the screen to a comfortable position. 	
			

Risk factors	Tick answer		Things to consider	Action to take
	Yes	No		
Is the screen free from glare and reflections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Use a mirror placed in front of the screen to check where reflections are coming from.</p> <p>You might need to move the screen or even the desk and/or shield the screen from the source of the reflections.</p> <p>Screens that use dark characters on a light background are less prone to glare and reflections.</p>	
Are adjustable window coverings provided and in adequate condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Check that blinds work. Blinds with vertical slats can be more suitable than horizontal ones.</p> <p>If these measures do not work, consider anti-glare screen filters as a last resort and seek specialist help.</p>	

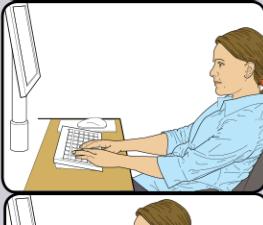
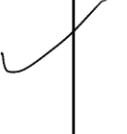
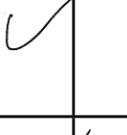
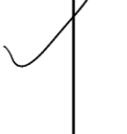
4 Software

Is the software suitable for the task?	<input checked="" type="checkbox"/>	<p>Software should help the user carry out the task, minimise stress and be user-friendly.</p> <p>Check users have had appropriate training in using the software.</p> <p>Software should respond quickly and clearly to user input, with adequate feedback, such as clear help messages.</p>
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Risk factors	Tick answer		Things to consider	Action to take
	Yes	No		

5 Furniture

Is the work surface large enough for all the necessary equipment, papers etc?	 	<p>Create more room by moving printers, reference materials etc elsewhere.</p> <p>If necessary, consider providing new power and telecoms sockets, so equipment can be moved.</p> <p>There should be some scope for flexible rearrangement.</p>	
Can the user comfortably reach all the equipment and papers they need to use?		<p>Rearrange equipment, papers etc to bring frequently used things within easy reach.</p> <p>A document holder may be needed, positioned to minimise uncomfortable head and eye movements.</p>	
Are surfaces free from glare and reflection?		<p>Consider mats or blotters to reduce reflections and glare.</p>	
Is the chair suitable? Is the chair stable? Does the chair have a working: <ul style="list-style-type: none"> ■ seat back height and tilt adjustment? ■ seat height adjustment? ■ castors or glides? 		<p>The chair may need repairing or replacing if the user is uncomfortable, or cannot use the adjustment mechanisms.</p>	

Risk factors	Tick answer		Things to consider	Action to take
	Yes	No		
Is the chair adjusted correctly?			<p>The user should be able to carry out their work sitting comfortably.</p> <p>Consider training the user in how to adopt suitable postures while working.</p> <p>The arms of chairs can stop the user getting close enough to use the equipment comfortably.</p> <p>Move any obstructions from under the desk.</p>	
				
				
				
Is the small of the back supported by the chair's backrest?			The user should have a straight back, supported by the chair, with relaxed shoulders.	
Are forearms horizontal and eyes at roughly the same height as the top of the DSE?			Adjust the chair height to get the user's arms in the right position, and then adjust the DSE height, if necessary.	
Are feet flat on the floor, without too much pressure from the seat on the backs of the legs?			If not, a footrest may be needed.	

Risk factors	Tick answer		Things to consider	Action to take
	Yes	No		

6 Environment

Is there enough room to change position and vary movement?	✓	<p>Space is needed to move, stretch and fidget.</p> <p>Consider reorganising the office layout and check for obstructions.</p> <p>Cables should be tidy and not a trip or snag hazard.</p>	
Is the lighting suitable, eg not too bright or too dim to work comfortably?	✓	<p>Users should be able to control light levels, eg by adjusting window blinds or light switches.</p> <p>Consider shading or repositioning light sources or providing local lighting, eg desk lamps (but make sure lights don't cause glare by reflecting off walls or other surfaces).</p>	
Does the air feel comfortable?	✓	<p>DSE and other equipment may dry the air.</p> <p>Circulate fresh air if possible. Plants may help.</p> <p>Consider a humidifier if discomfort is severe.</p>	
Are levels of heat comfortable?	✓	<p>Can heating be better controlled? More ventilation or air conditioning may be required if there is a lot of electronic equipment in the room. Or, can users be moved away from the heat source?</p>	
Are levels of noise comfortable?	✓	<p>Consider moving sources of noise, eg printers, away from the user. If not, consider soundproofing.</p>	

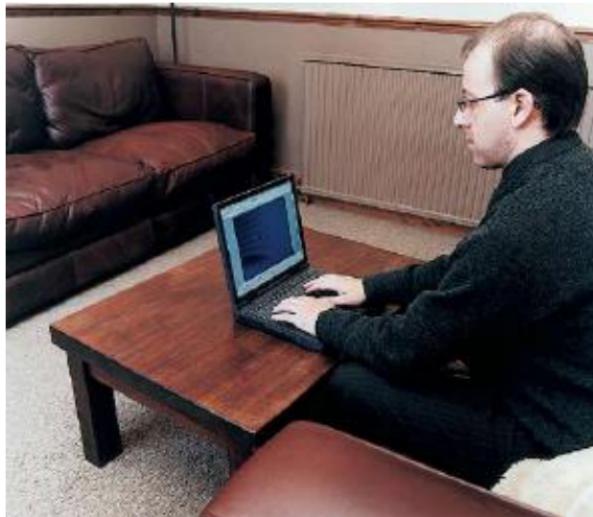
Additional guidance for 4th Year Project students using laptop computers

Laptops are designed for short term portable use. They have smaller keyboards and screens, compact pointing devices and very little adjustability. Prolonged use therefore can lead to discomfort.

Wherever possible, a separate keyboard, mouse and laptop stand should be used to improve the ergonomic arrangement in line with the general guidance on good ergonomics.

Laptop use, a summary:

- Use an external mouse and keyboard wherever possible.
- Use a proper desk rather than a bench or lap.
- Keep the mouse and keyboard at the edge of your desk.
- Adjust your chair so your desk allows your arms to work comfortably at the keyboard.
- Raise the laptop so the top of the screen is just below your eye level. Use a laptop stand, stack of books, or similar.
- Sit back in your chair and keep your head directly over your shoulders.
- Don't lean on your desk while typing and keep your elbows in line with your shoulders, hanging loosely at your sides.
- When using the laptop keyboard, try not to drop your wrists onto the wrist rest. Instead, move your hands freely across the keyboard and keep your hands in line with your elbows.
- Avoid prolonged carrying of laptops. If the laptop must be carried regularly over distance e.g. to another building on a weekly basis, a backpack carrier rather than a briefcase design.
- Security of individuals and the data held on laptop computers is also an issue of concern. If possible, tasks should be avoided that involve lone users carrying or storing portable equipment in any area where theft is a possibility.



Supplementary Questions for 4th Year Project Students

Risk Factor	Answer	Things to Consider	Record details here
Has the checklist covered all the problems that may arise from working with the VDU?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Are you free from experiencing any fatigue, stress, discomfort or other symptoms which you attribute to working with the VDU or work environment?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Any aches, pains or sensory loss (tingling or pins and needles) in your neck, back shoulders or upper limbs. Do you experience restricted joint movement, impaired finger movements, grip or other disability, temporary or permanently	
Do you take adequate breaks when working at the VDU?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Periods of two minutes looking away from the screen taken every 20 minutes and longer periods every 2 hours Natural breaks for taking a drink and moving around the office answering the phone etc.	
How many hours per day do you spend working with this computer?	<input type="checkbox"/> 1-2 <input type="checkbox"/> 3-4 <input checked="" type="checkbox"/> 5-7 <input type="checkbox"/> 8 or more		
How many days per week do you spend working with this computer?	<input type="checkbox"/> 1-2 <input type="checkbox"/> 3-5 <input checked="" type="checkbox"/> 6-7		
Please describe your computer usage pattern	<i>Most uni work done on home computer</i>		

Further information

Working with display screen equipment (DSE): A brief guide Leaflet INDG36(rev4)
HSE books 2013 www.hse.gov.uk/pubns/indg36.htm

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit www.hse.gov.uk/. You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

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First published 2013

ISBN 978 0 7176 6521 1

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