



## 12 Health and safety principles and coverage

Criteria	Range	Resource identified
12.1 The main requirements of key health and safety legislation applicable to engineering activities	Legislation – The Health and Safety at Work Act (HASAWA) 1974 Management of Health and Safety at Work Regulations 1992 Provision and Use of Work Equipment Regulations (PUWER) 1998 Personal Protective Equipment (PPE) Regulations The Control of Noise at Work Regulations Manual handling operations regulations 1992 Lifting operations and lifting equipment regulations (LOLER) 1998 Electricity at Work Regulations 1989 Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013 Control of Substances Hazardous to Health (COSHH) 2002	<a href="https://www.worksafe.uk.com/health-and-safety-legislation/">https://www.worksafe.uk.com/health-and-safety-legislation/</a> <a href="https://www.hse.gov.uk/pubns/hsc13.pdf">https://www.hse.gov.uk/pubns/hsc13.pdf</a> <a href="https://worksmart.org.uk/health-advice/health-and-safety/employer-duties/what-are-main-health-and-safety-regulations">https://worksmart.org.uk/health-advice/health-and-safety/employer-duties/what-are-main-health-and-safety-regulations</a>





<p>12.2 The importance of health and safety practices within the workplace</p>	<p>How health and safety legislation affects the frequency of accidents and related incidents. The importance of mental health and wellbeing in the workplace. The persons responsible for ensuring compliance – employer, employee, Health and Safety Executive (HSE). Implications of non-compliance.</p>	<p><a href="https://www.elearnuk.co.uk/uploads/courses/191.pdf">https://www.elearnuk.co.uk/uploads/courses/191.pdf</a> <a href="https://iosh.com/more/news-listing/why-health-and-safety-is-important/">https://iosh.com/more/news-listing/why-health-and-safety-is-important/</a> <a href="https://www.hse.gov.uk/treework/training-is-important.htm">https://www.hse.gov.uk/treework/training-is-important.htm</a> <a href="https://www.oshcr.org/what-are-the-benefits-of-following-health-and-safety-practices/">https://www.oshcr.org/what-are-the-benefits-of-following-health-and-safety-practices/</a></p>
<p>12.3 Responsibilities for health and safety</p>	<p>Responsibilities – Individual, employee and employer obligations, local, national, and global requirements</p>	<p><a href="https://www.hse.gov.uk/workers/employers.htm">https://www.hse.gov.uk/workers/employers.htm</a> <a href="https://www.hse.gov.uk/workers/responsibilities.htm">https://www.hse.gov.uk/workers/responsibilities.htm</a> <a href="https://www.hse.gov.uk/managing/legal.htm">https://www.hse.gov.uk/managing/legal.htm</a></p>
<p>12.4 Risk assessment</p>	<p>Stages of risk assessment – Identification of hazards (hazard and operability study (HAZOP), hazard identification (HAZID)), evaluation of risks (likelihood, severity, number of people affected), implementation of control measures (hierarchy of control: elimination, reduction/substitution, isolation, controls, administration/training/safe system of work, PPE)</p>	<p><a href="https://www.hse.gov.uk/simple-health-safety/risk/steps-needed-to-manage-risk.htm">https://www.hse.gov.uk/simple-health-safety/risk/steps-needed-to-manage-risk.htm</a> <a href="https://www.riskassessor.net/news/detail/five-steps-to-risk-assessment">https://www.riskassessor.net/news/detail/five-steps-to-risk-assessment</a> <a href="https://www.hse.gov.uk/construction/lwit/assets/downloads/hierarchy-risk-controls.pdf">https://www.hse.gov.uk/construction/lwit/assets/downloads/hierarchy-risk-controls.pdf</a> <a href="https://en.wikipedia.org/wiki/Hierarchy_of_hazard_controls">https://en.wikipedia.org/wiki/Hierarchy_of_hazard_controls</a> <a href="https://www.cdc.gov/niosh/topics/hierarchy/default.html">https://www.cdc.gov/niosh/topics/hierarchy/default.html</a></p>





<p>12.5 Health and safety considerations in specific engineering contexts</p>	<p>Considerations – Safe systems of work, oxygen use in the workplace, asphyxiation hazards, heat, moving parts, fire and explosion hazards, fire safety, guarding, manual handling, permit to work, lock out tag out (LOTO), maintenance</p>	<p><a href="https://www.allianz.co.uk/risk-management/risk-topics/health-safety/safe-systems-of-work.html">https://www.allianz.co.uk/risk-management/risk-topics/health-safety/safe-systems-of-work.html</a>  <a href="https://www.agg-net.com/documents/health-safety-risk-management-system/safety/s25-risk-assessment-safe-systems-of-work">https://www.agg-net.com/documents/health-safety-risk-management-system/safety/s25-risk-assessment-safe-systems-of-work</a>  <a href="https://app.croneri.co.uk/topics/safe-systems-work/indepth">https://app.croneri.co.uk/topics/safe-systems-work/indepth</a>  <a href="https://www.hse.gov.uk/msd/manual-handling/index.htm">https://www.hse.gov.uk/msd/manual-handling/index.htm</a>  <a href="https://www.hse.gov.uk/coshh/basics/permits.htm">https://www.hse.gov.uk/coshh/basics/permits.htm</a>  <a href="https://www.lockout-tagout.co.uk/Lockout%20Tagout%20Procedure.php">https://www.lockout-tagout.co.uk/Lockout%20Tagout%20Procedure.php</a></p>
	<p>Contexts – Chemicals, equipment with moving parts, confined spaces, electrical testing, high voltage electrical (generation, distribution, isolation and storage)</p>	<p><a href="https://www.hse.gov.uk/pubns/indg258.pdf">https://www.hse.gov.uk/pubns/indg258.pdf</a>  <a href="https://www.hse.gov.uk/coshh/basics/substance.htm">https://www.hse.gov.uk/coshh/basics/substance.htm</a>  <a href="https://www.hse.gov.uk/pubns/priced/hsg85.pdf">https://www.hse.gov.uk/pubns/priced/hsg85.pdf</a></p>

