

<b>Course Title</b>	Design of Steam and Condensate Systems
<b>Duration</b>	5 days
<b>Who is it for?</b>	Designers, plant engineers, consultants and those responsible for the general layout of steam and condensate systems
<b>What is it about?</b>	This project based course provides specialist knowledge of current practices in steam and condensate systems and the factors to be considered in their design.
<b>Course objectives</b>	<ul style="list-style-type: none"><li>• Understand the properties of steam and why it is used</li><li>• Calculate the steam demand for different types of steam plant</li><li>• Understand the requirements of steam distribution system</li><li>• Understand the need for different steam traps and air vents</li><li>• Understand the different methods of steam trap checking and their advantages and disadvantages</li><li>• Explain the requirement to remove and recover condensate</li><li>• Understand the need for pressure reduction and the different types available</li><li>• Explain the factors affecting control valves</li><li>• Realise the importance of flash steam recovery</li><li>• Explain how safety valves are set, lift and leak</li><li>• Size pressure reducing valves, steam pipe, condensate pipe, control valves, steam traps, condensate pumps, flash vessels, safety valves and blowdown vessel</li></ul>
<b>What is covered</b>	<ul style="list-style-type: none"><li>• Steam Fundamentals</li><li>• Boiler sizing</li><li>• Steam demand of plant</li><li>• Steam distribution</li><li>• Pressure control and safety valves</li><li>• Steam trapping and air venting inc Steam trap checking</li><li>• Condensate recovery</li><li>• Boiler house sizing</li><li>• Temperature controls</li></ul>
<b>Pre-requisites</b>	A good technical knowledge is needed. Delegates will benefit by first taking the Steam Utilisation correspondence course.
<b>Outcome</b>	City & Guilds Accredited Certification
<b>Format of course</b>	Project based including practical boiler house tour and demonstrations, open book exam. Also available as Remote Live option.

