

National Certificate in Energy and Chemical Plant (Boiler Operation) (Level 2)

| COMPULSORY | | | | |
|--|--|-------|-----------|------|
| Unit | Unit Title | Level | Credit | Tick |
| 3046 | Operate energy and chemical plant fire safety equipment | 3 | 5 | ✓ |
| 21461 | Demonstrate knowledge of the basic principles of steam generation and of combustion theory | 2 | 6 | ✓ |
| 21462 | Demonstrate knowledge of the basic equipment and systems used for steam generation | 2 | 8 | ✓ |
| 21463 | Operate and monitor a boiler up to 20 MW | 2 | 6 | ✓ |
| 21468 | Demonstrate knowledge of energy and chemical plant pollutants and their control measures | 2 | 5 | ✓ |
| 21469 | Operate energy and chemical plant personnel safety systems | 2 | 5 | ✓ |
| 21470 | Identify boiler house chemicals and explain their safety procedures | 2 | 3 | ✓ |
| TOTAL OF 38 COMPULSORY CREDITS REQUIRED | | | 38 | |

| ELECTIVE – A minimum of 4 credits | | | | |
|-----------------------------------|---|-------|--------|------|
| Unit | Unit Title | Level | Credit | Tick |
| 497 | Protect health and safety in the workplace | 1 | 1 | |
| 3032 | Operate valves on energy and chemical plant | 4 | 8 | |
| 3054 | Read and interpret instruments used on energy and chemical plant | 3 | 5 | |
| 17603 | Demonstrate knowledge of properties of raw water and its uses in energy and chemical plant | 2 | 6 | |
| 20645 | Describe the requirements of the HSNO Act 1996 relevant to approved handlers | 3 | 3 | |
| 21452 | Monitor energy and chemical plant and processes | 3 | 5 | |
| 21460 | Meet requirements of person responsible for an unattended boiler | 3 | 8 | |
| 21464 | Demonstrate knowledge of basic thermodynamics and measurement for energy and chemical plant | 3 | 6 | |
| 21465 | Operate pumps on energy and chemical plant | 4 | 8 | |
| 21467 | Store and handle chemicals for energy and chemical plant | 3 | 8 | |