

COMPETENCE MODULE SHEET

B
Design of Engineering Systems (Public Health – selective)
OBJECTIVE:

Demonstrate capability in the planning, execution and management of the design process, from concept to tender/detail design stage, of selected public health engineering systems in modern construction projects:

Any **TWO** systems from:

- B (PH1) Fire Suppression Systems
- B (PH2) Waste Management Systems
- B (PH3) Gaseous Piped Services
- B (PH4) Water Abstraction from Boreholes
- B (PH5) Swimming Pool Water Treatment
- B (PH6) Designing for the Middle East and North Africa (MENA)

Note: See separate sheets (PH1) – (PH6).

TYPICAL EVIDENCE RECORD: Some of the following, or similar:

- Analysis, assessment and/or calculations
- Preliminary sketch designs
- Project calculation files
- Schematic and layout drawings
- Specifications or proposals

TYPICAL COMPETENCE ASSESSMENT: Some of the following, or similar:

- Correct design approach to satisfy brief criteria
- Correct application of regulations and standards
- Correct assessment of demand criteria
- Correct selection of system arrangement and ratings
- Correct design development calculations
- Correct drawing/ specification/ solution/ development

TYPICAL ACTIVITIES: Some of the following, or similar:

- *On-the-job training in a project design team*
- *Study of CIBSE online modules*
- *Lectures and seminars on this subject*
- *Private study of British Standards, other standards, design guides, manufacturers' technical literature, journals and publications*
- *Project design work*