# **Higher Nitec in Civil & Structural Engineering Design**

### HFCSZ

Higher Nitec in Civil & Structural Engineering Design

Specialisation / Option: Reinforced Concrete Design and Detailing

6 month IA Duration

#### ED5034FPE-1

- 1. Produce details of piles and pile caps
- 2. Produce structural layout plans.
- 3. Produce plans and sections of reinforced concrete foundation.
- 4. Produce details of reinforced concrete retaining walls.
- 5. Produce details of reinforced concrete slab.
- 6. Produce details of reinforced concrete core walls.
- 7. Prepare schedules of column and wall.
- 8. Produce details of reinforced concrete beams and beam schedules.
- 9. Produce details of reinforced concrete staircase.
- 10. Produce details of precast concrete component.

### HFCSZ

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Specialisation / Option: Steel Structure Design and Detailing

6 month IA Duration

## ED5034FPE-2

- 1. Produce layout plans of steel structures and schedules of steel members.
- 2. Produce detailed connections of steel members.
- 3. Produce details of straight flight steel staircase.

- 4. Produce plan, section and elevation of steel truss construction.
- 5. Produce detailed connections of steel roof truss.
- 6. Produce details of steel portal frame construction.

## **HFCSZ**

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Specialisation / Option: External Works

6 month IA Duration

ED5034FPE-3

- 1. Produce site layout plan of roads, tree plantings, drainage and sewerage systems.
- 2. Produce longitudinal and cross-sectional profiles of drains and sewers.
- 3. Produce details of drains and culverts.
- 4. Produce details of carriageway.