

# Higher Nitec in Civil & Structural Engineering Design

HF3CS

Higher Nitec in Civil & Structural Engineering Design

Specialisation / Option: Reinforced Concrete Design

3 month IA Duration

CS43005FPE-1

1. Produce structural layout plan or details.
2. Produce bar bending schedule.
3. Assist in supervision of construction works or track/monitor construction progress
4. Prepare status reports for submission to client, contractor or authorities.
5. Prepare bill of quantities.
6. Prepare preliminary test reports.
7. Produce BIM models for structural components
8. Prepare details of PPVC unit
9. Produce connection details of precast members
10. Produce reinforced concrete foundation drawings
11. Produce details of piles and pile caps

HF3CS, HF2CS, HFXCS

Higher Nitec in Civil & Structural Engineering Design

Specialisation / Option: Reinforced Concrete Design

6 month IA Duration

CS53004FPE-1

CS53005FPE-1

1. Produce structural layout plan or details.
2. Produce bar bending schedule.
3. Assist in supervision of construction works or track/monitor construction progress
4. Prepare status reports for submission to client, contractor or authorities.
5. Prepare bill of quantities.
6. Prepare preliminary test reports.
7. Produce reinforced concrete foundation drawings
8. Produce details of piles and pile caps
9. Produce details of reinforced concrete beams
10. Produce details of reinforced concrete core walls
11. Prepare details of reinforced concrete floor
12. Produce details of half-turn reinforced concrete staircase

HF3CS

Higher Nitec in Civil & Structural Engineering Design

Specialisation / Option: External Works and Road Construction

3 month IA Duration

CS43005FPE-3

1. Produce structural layout plan or details.
2. Produce bar bending schedule.
3. Assist in supervision of construction works or track/monitor construction progress
4. Prepare status reports for submission to client, contractor or authorities.
5. Prepare bill of quantities.
6. Prepare preliminary test reports.
7. Produce site layout plan of external works
8. Produce details of external works
9. Produce drain profiles
10. Produce sewer profiles

HF3CS, HF2CS, HFXCS

Higher Nitec in Civil & Structural Engineering Design

Specialisation / Option: External Works and Road Construction

6 month IA Duration

CS53004FPE-3

CS53005FPE-3

1. Produce structural layout plan or details.
2. Produce bar bending schedule.
3. Assist in supervision of construction works or track/monitor construction progress
4. Prepare status reports for submission to client, contractor or authorities.
5. Prepare bill of quantities.
6. Prepare preliminary test reports.
7. Produce site layout plan of external works
8. Produce drain profiles
9. Produce sewer profiles
10. Produce details of external works
11. Produce details of typical road reserve
12. Produce details of road carriageway
13. Produce 3D ground surface profile

HF3CS

Higher Nitec in Civil & Structural Engineering Design

Specialisation / Option: Steel Structures Design

3 month IA Duration

CS43005FPE-2

1. Produce structural layout plan or details.
2. Produce bar bending schedule.
3. Assist in supervision of construction works or track/monitor construction progress
4. Prepare status reports for submission to client, contractor or authorities.
5. Prepare bill of quantities.
6. Prepare preliminary test reports.
7. Produce layout plans of steel structures
8. Produce detailed connections of steel members
9. Produce steel roof truss drawings
10. Produce detailed connections of steel roof truss
11. Produce details of steel portal frame

HF3CS, HF2CS, HFXCS

Higher Nitec in Civil & Structural Engineering Design

Specialisation / Option: Steel Structures Design

6 month IA Duration

CS53004FPE-2

CS53005FPE-2

1. Produce structural layout plan or details.
2. Produce bar bending schedule.
3. Assist in supervision of construction works or track/monitor construction progress
4. Prepare status reports for submission to client, contractor or authorities.
5. Prepare bill of quantities.
6. Prepare preliminary test reports.
7. Produce layout plans of steel structures
8. Produce detailed connections of steel members
9. Produce steel roof truss drawings
10. Produce detailed connections of steel roof truss
11. Produce details of steel portal frame