

**DUTY 6**

**Tasks**

**Fabricate Staircase Reinforcement**

- 6.1 Construct bending angle template
- 6.2 Lay-out centers for staircase reinforcement
- 6.3 Bend staircase steel to match decking angle
- 6.4 Assemble stairs reinforcement

**DUTY 7**

**Tasks**

**Fix Below Ground Reinforcement**

- 7.1 Fix pile caps to piles
- 7.2 Place reinforcement mat for column starter
- 7.3 Fix column starter to reinforcement mat
- 7.4 Fix ground beam to strip footing
- 7.5 Fix ground beam to column starter and mat
- 7.6 Fix wall-steel started to strip footing
- 7.7 Lap steel joint junction and corners
- 7.8 Fix strip footing to column starter

**DUTY 8**

**Tasks**

**Fix Above Ground Reinforcement**

- 8.1 Off-set beam bars
- 8.2 Fix column to stub column
- 8.3 Fix corners to beam junctions
- 8.4 Fix beam to boxing area
- 8.5 Fix beams between columns
- 8.6 Fix floor slab
- 8.7 Fix staircase bars
- 8.8 Fix chairs

---

BARBADOS VOCATIONAL TRAINING BOARD  
"Lawrence Green House"  
Culloden Road  
St. Michael  
436-7970



**BARBADOS  
VOCATIONAL  
TRAINING  
BOARD**

**SKILLS TRAINING PROGRAMME  
in**



**STEEL BENDING  
AND FIXING**

## Steel Bending and Fixing

On completion of training, the trainee will be able to:

1. Fabricate building reinforcement consisting of columns, column mats, column starters, strip and wide strip foundation, wall steel starters, ground and ring beams, floor slabs and stairs according to bar schedule specifications.
2. Fix building reinforcement in position according to engineer's reinforcement drawing specification.

---

### OCCUPATIONAL/SKILLS PROFILE—STEEL BENDING AND FIXING

#### DUTY 1 Tasks

##### Fabricate Column Mats

- 1.1 Interpret engineer's reinforcement drawings
- 1.2 Interpret Bar Schedules
- 1.3 Measure/cut steel
- 1.4 Bend right angle hooks
- 1.5 Bend "C" hooks
- 1.6 Fabricate template for angle-shaped column mats
- 1.7 Lay-out column mat centers
- 1.8 Assemble square mats
- 1.9 Assemble rectangle mats
- 1.10 Assemble triangular mats
- 1.11 Assemble double crank mats
- 1.12 Assemble double layer mats

#### DUTY 2 Tasks

##### Fabricate Ground Footing Reinforcement

- 2.1 Layout strip foot centers
- 2.2 Assemble strip footing
- 2.3 Bend traverse bars

#### DUTY 2 Tasks

##### Fabricate Ground Footing Reinforcement

- 2.4 Assemble wide strip footing
- 2.5 Construct multi-angle stirrup template
- 2.6 Bend multi-angle stirrups
- 2.7 Bend "L" shape stirrups
- 2.8 Assemble "L" shape beams
- 2.9 Assemble tray beams
- 2.10 Assemble inverted "T" beams
- 2.11 Assemble cap beams

#### DUTY 3 Tasks

##### Fabricate Column Reinforcement

- 3.1 Bend circular stirrups
- 3.2 Bend spirals
- 3.3 Bend loop (sausage) stirrups
- 3.4 Bend "C" shape stirrups
- 3.5 Layout column centers
- 3.6 Assemble "L" shape columns
- 3.7 Assemble circular columns
- 3.8 Assemble "T" shape columns

#### DUTY 4 Tasks

##### Fabricate Beam Reinforcement

- 4.1 Layout beam centers
- 4.2 Construct multi-angle stirrup template
- 4.3 Assemble square/rectangular beams—floor, lintel ring
- 4.4 Assemble triangular beams
- 4.5 Assemble spiral columns
- 4.6 Assemble stub columns

#### DUTY 5 Tasks

##### Fabricate Floor Slab Reinforcement

- 5.1 Bend uneven "U" bars
- 5.2 Bend "chairs"
- 5.3 Crank bars
- 5.4 Layout floor reinforcement centers
- 5.5 Assemble straight slab reinforcement
- 5.6 Assemble staggered floor slab reinforcement
- 5.7 Assemble double layer slab reinforcement