

## **ENG VB Learning**

### **Shaping Career in Virtual Construction**

### **Electrical Systems**

- Estimation of Electrical Load
- Substations Planning
- Electrical Room Layout
- Electrical Installation Details
- Earthing System
- Lightning Protection System
- Emergency Lighting
- Aircraft Warning Lighting
- External Electrification Works
- Standby power supply system to provide back up with DG sets
- UPS & Invertor System
- Electrical Equipment Schedule
- Cable / Busbar Sizing
- Voltage Drop Calculations
- Transformer/Capacitor Bank/Generator Sizing Calculations
- Incorporating technical details furnished by the specialist consultants during the design development stage

### **Plumbing and Drainage Systems**

- Domestic Hot Water System
- Domestic Cold Water System
- Drainage system
- Underground Storage Water Tank sizing
- Overhead Storage Water Tank Sizing
- Sewerage system
- Surface Drain
- Storm / Rain Water Drainage
- Rainwater collection, retention and harvesting system
- RO Water Treatment Plant (WTP) Sizing
- Sewage Treatment Plant (STP) Sizing
- Primary Services for the Swimming Pool
- Primary Services for the Water Body
- Primary services for the Landscape and Irrigation water system
- Hydraulic Calculations
- Equipment Schedule
- Incorporating technical details furnished by the specialist consultants during the design development stage



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#### **Fire Protection Systems**

- Fire hydrant system
- Fire sprinkler system
- Fire pumps and ancillaries
- Fire Suppression System
- Equipment Schedule
- Incorporating technical details furnished by the specialist consultants during the design development stage

### **HVAC System**

- Comfort Cooling/Ventilation load Calculations
- Ventilation system design based on GREEN BUILDING requirements, International Standards and local norms
- Duct Sizing and ESP Calculations
- Staircase, lift lobby and lift well pressurization
- Basement Car Park Ventilation System
- Smoke extract system
- Toilet exhaust systems
- Equipment Schedule
- Incorporating technical details furnished by the specialist consultants during the design development stage

#### FA, PA, CCTV & Security Systems

- Fire Alarm System
- Public Address System
- CCTV System
- Cable TV
- Intercom
- Structured Cabling
- Incorporating technical details furnished by the specialist consultants during the design development stage