# Quantity Surveying Estimation & Billing

A Quantity Surveyor is a building industry professional who specialises in estimating the cost of construction works.

Estimation & QS studies at Infini helped me upgrade my skills, broaden my perspective and build confidence in becoming a professional Engineer. Practical based approach, new proven tools and techniques and training of latest software created the best career platform for me as a Quantity Surveyor.

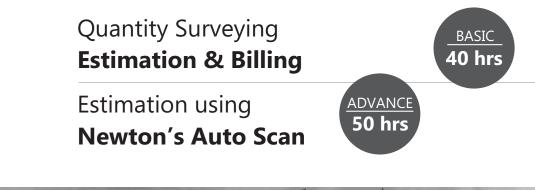
> - **Vijaykumar Kshirsagar** Billing Engineer, Samarth Infra Group Gujarat Refinery Project, IOCL



**infini Institute of Program Management** Recognised centre of EAL, UK <sup>building</sup> competency skills

User rating\*

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Weekly batches at Pune Monday to Friday 2 hrs a day

### Sunday batch

6 hrs a day

Batch timings are flexible as per the availability of trainer / learners.

Level - Basic / Advance

Quantity surveyors use their skills to determine the cost of building work ranging from residential properties to assessing the construction cost of new multi-million dollar office towers.

Quantity Surveyors are involved at various stages of the construction process, typically prior to construction, during construction and following completion of the works.

### The role of Quantity Surveyor

Quantity surveyors work with accountants, architects, engineers, builders, building owners, developers, financiers, government, valuers, and subcontractors.

The quantity surveyor's detailed knowledge of construction costs allows them to perform the following tasks:

### **Prior to Construction**

- Estimating to define project budgets
- Analysis of the effect of design changes on the project budget
- Cost planning to refine the budget as the design documents develop
- Preparation of Bills of Quantities to assist in the tender process
- Reviews of Builder's tender submissions

### **During Construction**

- Application of cost control services during construction
- Assessment of the builder's progress claims
- Assessment of variation and delay claims

### **Post Construction**

• Determination of the final project cost



# GET THE CAP OF ESTIMATOR / QUANTITY SURVEYOR

### Who shall do this course?

Diploma civil with min. 1 year of experience or BE Civil or Architectural students or professionals having interest to go into Estimation, Costing & Billing area.

### What are the job opportunities?

This certification opens the door of positions like Quantity surveyors, Estimation engineers, Billing engineers, Cost estimators particularly in the Real Estate sector.

### Is there any placement support?

Yes, infini's student gets placement support after completion of this course. Though the guarantee is not taken to place you, few contacts of job opportunities are definitely shared with you. You can then approach to those companies on your own.



### Why should you learn?

Every building has its price. Accurately forecasting the cost of future projects is an important skill for civil engineers and cost estimators.

### How should you learn?

from foundation till finishing items. With the help of software it can be done in just minutes—as opposed to days using traditional methods. The software provides greater flexibility than typical databases or spreadsheets, enabling a smoother, more accurate work-fow for cost estimators. But in the absence of mastering this technique manually, you may become just a software operator and not a good Engineer / Estimator. Software will support you enhance your proficiency and not the logic / fundamentals. Let software not replace your talent.

Quantity takeoff helps you to takeoff quantities of all items of an entire building project



### What's role of software?

Software like Revit, Newton etc. are used now a days to take quantity takeoffs. But its accuracy depends on the quality, accuracy and detailing of autoCAD drawing.

Software helps to automatically measure are as and count or price building components such as walls, doors, and window. You can create detailed materials reports much faster than paper-based processes. You can keep your workflow digital and help ensure that reports, materials quantities, and other data remain up to date. Importantly, you can more efficiently count and quantify building components and their compositions.

# What is the course syllabus ?

- Role of a estimation engineer, billing engineer and cost engineer and their tasks on site, head office
- Concept of "project & it's processes
- Conversion of units & conversion of rates
- The principles of measurement as per IS code
- Study of civil drawings
- Specifications and materials
- Bar bending schedule
- Rate analysis
- Different types of estimate
- MEP works, drawings and its estimation
- Project budget and its heads

- Monthly valuation and billing for subcontractors & client
- Billing as per contract & RA billing for subcontractor
- Client billing
- · Legal aspects and contractual obligations
- Prepare various reports (Budget Report, Actual Report, Cash flow)
- Soft skills in estimation
- Material reconciliation
- Tendering basic
- MAHARERA norms overview

### In addition to above, following additional points will be covered in advance level training-

• Application of Auto Scan software for working out BOQ, billing, tendering work and project budget.

## What are the learning outcomes?

After successful completion of training you will be able to demonstrate -

- Accurate reading of various drawings architectural, RCC & working;
- Use of principles of measurements;
- Use of relevant code of standards;
- Accurate taking-off quantities of various materials and items involved in a building project;
- Rate analysis of major items & extra items / non tender items;
- Preparation of BBS and BOQ;
- Preparation of project budget, its monitoring & control;
- Cash flow preparation;
- Monthly RA billing;
- · Billing for subcontractors & client;
- Create summaries and detailed quantity surveying reports accurately.

# In addition to contents of basic course, following additional learning will take place in Newton's Auto Scan :

- You can use Auto Scan software for preparing BOQ reports, billing and costing. You can prepare tender works.
- You can do contractor bills, analysis of rates, monitoring of project in terms of quantities and costing.

# Tutors

### Vipul Patil

BE (Civil) with 19 years of vast and varied experience in designing, estimation, costing, project planning & execution. Worked with Satish Marathe consulting engineers (Pune), Force 10 (UAE), Bhavan Contracting Company LLC (UAE), Galfar SAOG (Oman)

### Nikhil Agrawal

M. E. (Structures), B. E. Civil with 11years of professional experience in Design & detailing, Planning and Estimation, Software training. Working as Manager at Rohan Builders. Proprietor - Neev Designers.

### **B T Ade**

M. E. (CM), PMP<sup>®</sup>, Microsoft Certified Professional, with 17 years of experience in project planning, execution & management, and software training.







### Extra support / benefit

Infini's student gets 3 months online support (via phone / mail) after completion of the program to resolve basic issues being faced by the learner on site.

10% discount on fees is available to all infini's students for registering to 2nd or subsequent programs.

Cash reward / concession in fees after you recommend a good candidate to our course and if he/she registers for the program with infini.

### Guarantee

Infini takes guarantee to imbibe necessary technical, applied and software skills into you to make you more efficient and **deserving to handle higher responsibilities leading to increments and promotions.** 

### What is the Software base to this training?

You will be exposed to AutoCAD for reading various drawings, and excel for doing rate analysis and preparing BOQs, budgets, dash boards, reports.

### What is the learning method / pedagogy?

All the fundamentals are taught from the point of view of their on field practical applications. Actual drawings are shared with you to study and learn skills of taking-off quantity. Visit(s) are arranged / live cases are discussed to make you understand principles of measurement and preparation of BBS. Videos & models are shared for better visualization and understanding of complex fundamentals. Ample assignments are given for study and confirmation of actual learning.

### How does assessment take place?

After completion of major learning / topic, there is an assignment to judge your level of understanding of that particular chapter. Overall there are 8-10 assignments. Your performance is tracked and finally converted into 'Grade' which is reflected on the certificate. A+: Excellent; A : Very good; B : Good; C: Satisfactory

### How to pass and avail certificate?

You need to attend all sessions, complete all assignments, appear for an external viva and pay all fees to be eligible for the certificate.

### What are the requirements / pre requisite to undergo this training?

You need to be a positive learner. You shall bring a scientific calculator, a measuring tape and laptop every day. Assignments shall be completed and submitted on time. 100% attendance is compulsory. Generally deliveries are not repeated.

### Language of instruction

English (mostly), and Marathi / Hindi (if necessary).

# Why choose us?We build trust at infini. Along with quality delivery,<br/>at infini you are ensured to getImage: Why choose us?Image: We build trust at infini. Along with quality delivery,<br/>at infini you are ensured to getImage: Why choose us?Image: We build trust at infini. Along with quality delivery,<br/>at infini you are ensured to getImage: We build trust at infini. Along with quality delivery,<br/>at infini you are ensured to getImage: We build trust at infini. Along with quality delivery,<br/>at infini you are ensured to getImage: We build trust at infini. Along with quality delivery,<br/>at infini you are ensured to getImage: We build trust at infini. Along with quality delivery,<br/>at infini you are ensured to getImage: We build trust at infini. Along with quality delivery,<br/>at infini you are ensured to getImage: We build trust at infini. Along with quality delivery,<br/>at infini you are ensured to getImage: We build trust at infini you are ensured to getImage: We build trust at infini. Along with quality delivery,<br/>at infini you are ensured to getImage: We build trust at infini. Along with quality delivery,<br/>at infini you are ensured to getImage: We build trust at infini. Along with quality delivery,<br/>Build trust at infini. Along with qu

### About Infini:

Infini Institute is a companionship of Civil Engineers formed with a motto of imparting value added competency enhancement trainings to the construction personnel, students and faculties at all levels to transform them into professionals. We are EAL, UK recognized center, 1st such center in India.

### Our services :

### \* Short term training programs -

- QS, Estimation & Billing
- Project Estimation & Planning
- Project planning & scheduling using MS Project / Primavera
- Project Management using MS Project / Primavera
- Building Information Modeling (BIM)
- Revit Architecture, Structural and MEP
- PMP and CAPM certification preparation
- \* 1 Yr Full time PG program in Construction Project Management (International Certification)
- \* Employability Skills testing for Institutes and Industry
- \* MDPs and FDPs (tailor made)
- \* Consultancy in Project Management

### infini institute of program management

Address : Shri Shivaji Maratha Campus, 3rd Floor, IMR building, S. No. 74/1A/1B, Aranyeshwar, (Near Parvati) Pune- 411009



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M +91 94230 03268, +91 77200 75764; P +91 20 6532 6535 W www.infinisolutions.in; E headstcp@infinisolutions.in F infinisolutionspune/ Code: 00055 Sept 2017