

## Construction Engineering Surveying training courses

Our Engineering Surveying training courses are ideal for beginners, those seeking a career change, graduates, assistants, and junior engineers looking to advance their careers in construction engineering and surveying. We understand that embarking on a new job can be challenging, but we are here to support you every step of the way. With over 30 years of experience and training with more than 1,200 learners, we have developed expertise in effectively training beginners. You could earn between £150 and £300 per day within a year.

**Training timetable: Engineering surveying classes are offered every month in London on the following dates**

**We offer a flexible six-to-twelve-day training course that is designed to be appropriate for learners from a wide variety of backgrounds, leading to unit certificates for individual units or full qualification to apply for a gold CSCS engineer surveyor card**

### Week 1, or the first three weekends of a month

- Principles of surveying
- Surveying mathematics
- Principles of levelling, using automatic, laser and digital levels
- Traversing to establish site controls
- GNSS for surveying and setting out
- AutoCAD for beginners

Fees: £1246 plus VAT (£1495)

### Week 2, or the second leg of the six-weekend sessions, the following month

- Introduction to Total Stations
- Total station settings and programs
- Surveying and setting out exercises
- GNSS for surveying, setting out, and establishing site controls
- AutoCAD for engineers

Fees: £1246 plus VAT (£1495)

### Fees

Weeks 1 and 2, or twelve weekend sessions over two months

£2496 plus VAT (£2995)

Leading to full qualification to apply for a gold CSCS engineer surveyor card, subject to satisfactory completion of assessments

**Unit certificates or qualification fees: £95 payable upon issue of certificates**

Existing engineers can register for week 1 or the first six weekends only to achieve full qualification and to apply for a gold CSCS engineer surveyor card.

Graduates, assistant engineers, and junior engineers can enroll in week 2 of the course for comprehensive Total Station training and a unit certificate in setting out. All learners who wish to achieve full qualification must enroll in the whole course, including weeks 1 and 2, or attend twelve weekend sessions. Please note that there is an added fee of just £95 for certificate or qualification fees for all courses.

### Beginner to enhanced level course, Fee: £3995 including VAT

The Beginner to Enhanced course is designed for individuals new to or transitioning into construction engineering and surveying. This course enables learners to repeat the entire two-week or 12-week session one more time, either immediately or within six months, to achieve a better understanding and gain more hands-on experience in using surveying instruments. The course also includes.

- First Aid at Work certificate and free annual refresher for two more years
- Learn how to fly drones to capture photos and videos of site work progress and inspections.
- One-to-one tutorials and support for engineering qualification on agreed dates and times
- Free Award in Mentoring and Coaching

**Entry requirements: This course does not require entry requirements except a satisfactory English language proficiency level, both verbally and in writing.**



### **Post-training support**

Telephone, email, and WhatsApp support.

Arrange to visit the college for face-to-face support. Contact us from work by WhatsApp for support.

**Please be aware of the following.**

- Most providers issue unrecognized in-house certificates. Before paying any deposit or fees, please request written confirmation that, with their certificates, you can apply for a gold CSCS engineer surveyor card, or they will refund your money.
- Awarding bodies monitor and quality-assure their centers; however, those that issue in-house certificates are not quality-assured. See their Google or Trustpilot reviews; don't believe their marketing hype.
- Avoid non-VAT-registered providers. This is a major red flag; an established training provider should be VAT registered. They avoid tax and VAT and look a lot cheaper than others. Not VAT-registered providers usually delete the learner's details from their records as if they never existed. As a result, they do not provide proper invoices, post-training support, extra classes, or valid qualifications. Remember, you can claim back 20% tax and 20% VAT if you have an invoice and you and the provider is VAT-registered. You can easily register for VAT as a self-employed. Please check with HMRC or an accountant on how to claim tax and VAT back.
- Check if you can join next month to make up for any missed classes. If the answer is no, then there is no post-training support.
- Determine if they are a limited liability company. Limited companies are safer, as their records are publicly available. Avoid non-limited company providers, as you never know who they are and where they are based.
- Ask to see a specimen of their certificate and ensure the OFQUAL name is on it. Otherwise, it isn't very worthy, and you cannot apply for a gold CSCS engineer surveyor card.





Key requirements of quality training

- CSCS valid courses



- Nationally and internationally recognized qualifications
  - VAT registration
- Limited company registration
- Recovery of missed lessons in their subsequent training sessions
- Records of who they are and the head office location
  - Trustpilot reviews
- **Avoid providers missing even one of the above**

- Key topics of the course. Principles of Surveying, Mathematics of Surveying, Levelling, two peg tests, introduction to Total Stations, basic surveying, and setting out

Principles of surveying	<u>Levelling</u>	<u>Total Stations</u>	<u>GNSS</u>	Setting out methods
<ul style="list-style-type: none"> <li><u>Pythagoras theorem</u></li> <li><u>How Total Stations use basic math to work.</u></li> <li><u>Calculating distances, bearings, angles, and heights</u></li> <li><u>Calculating areas, volumes, and gradients</u></li> <li><u>Working out coordinates from drawings</u></li> <li><u>Establishing local grids and coordinate systems</u></li> </ul>	<ul style="list-style-type: none"> <li><u>Principles of levelling</u></li> <li><u>Levelling by automatic, laser, and digital levels</u></li> <li><u>Two peg test calibrating levelling instruments</u></li> <li><u>Levelling traverse</u></li> <li><u>Establishing site datums and TBM's</u></li> <li><u>Levelling by Total Stations</u></li> </ul>	<ul style="list-style-type: none"> <li><u>How Total Stations work</u></li> <li><u>Distance and angle measurement</u></li> <li><u>Rounds of angles</u></li> <li><u>Traversing</u></li> <li><u>Establishing site controls</u></li> <li><u>Control Networks</u></li> <li><u>Resection program</u></li> <li><u>National and local grids</u></li> </ul>	<ul style="list-style-type: none"> <li><u>How GNSS works</u></li> <li><u>Advancements in technology</u></li> <li><u>Static and RTK modes</u></li> <li><u>Surveying and setting out by GNSS</u></li> <li><u>Establishing site controls</u></li> <li><u>Topographic surveys</u></li> </ul>	<ul style="list-style-type: none"> <li><u>Key instrument programs</u></li> <li><u>Stakeout, Surveying, principles of setting out.</u></li> <li><u>Setting out Piles, walls, columns, foundations</u></li> <li><u>Measuring angles, distances, and heights</u></li> </ul>
<p>Final qualifications or certificates gained. For existing engineers, advanced and enhanced learners only</p> <p>ProQual Level 3 Diploma in Engineering Surveying to apply for a gold CSCS engineer surveyor card</p> 				<p>To book this course, please pay by BACS to the college account, using your name as a reference, or pay online.</p> <p>Finchley College (this is a business account) Sort code: 09-01-27 Account no. 44018113</p> <p>Alternatively, pay online, <a href="http://www.finchleycollege.com">www.finchleycollege.com</a></p>

## **Week 1: Six days full-time (Mon-Sat) or six weekend sessions in one month**

### **Principles of surveying**

- Health and safety in construction-Risk assessment
  - Understanding construction hazards and their protection measures
  - How to carry out a dynamic risk assessment
- Quality, precision, and checking
  - Differences between quality and precision
  - When to work at a higher or lower quality
  - What does precision mean to an engineer or a surveyor
  - Check lists before, during, and after surveying and setting out
- Types of control markers and importance of their accuracy and reliability
- Scales and plot sizes
  - construction drawing scales and plot sizes
  - How to work out the scales of drawings
  - Coordinate system, National and local grid
  - How to create your own local grids
- Drawing and data formats

### **Surveying mathematics**

- Pythagoras theorem
- Calculating distance and bearing between two points
- Establishing coordinates for your local grid system
- Converting local and global coordinate systems
- How Total stations use mathematics for surveying and setting out
- How to set Total Station heights

### **Principles of levelling**

- Learning to use Automatic, laser and digital levels
- Different types of datums, Ordnance, OSBM, Site datums and TBM's
- Establishing arbitrary site datums or by using GNSS
- Level surveys
- Calculating reduced levels
- Checking levelling instrument calibration by two peg tests

### **Traversing**

- Establishing site controls by traversing and baselines
- Adjusting traverse for angle and distance errors
- Setting station coordinates
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### **Using GNSS for surveying and setting out**

- How GNSS systems work
- Surveying and setting out by GNSS
- Establishing site controls by GNSS

- AutoCAD for beginners

## **Week 2: Engineering surveying course timetable**

### **Setting out and surveying**

**Week 2-Six-day full-time or six weekend sessions in one month**

#### **Introduction to Total Stations**

- Background to Total Station development
- How Total Stations use surveying mathematics to work
- Manual and robotic Total Stations
- Revision of surveying mathematics
- Uploading points to the instrument
- Setting up and levelling Total Stations
- Setting up over a point
- Total Station settings
- Measuring angles, distances, and heights

#### **Setting out techniques**

- Radial
- Local
- Coord 1
- Coord 2

#### **Overview of Total Station programs**

- Resection, surveying, stake out, reference line, reference arc
- Resection practice
- Stake out points, piles, slab edges, and corners
- Stake out gridlines and offsets
- Transfer points up through buildings
- Transfer heights to upper floors

#### **Setting out practice**

- Extracting point coordinates from drawings, emails
- Uploading point coordinates to Excel spreadsheet
- Uploading spreadsheet files to Total Stations
- Setting out walls, columns, drains, slab edges and corners
- Setting out drainage, foundations, and groundworks

#### **Setting out practice**

- Setting out arcs, roads, and ramps, profile boards for roadworks and motorways
- Setting out openings in slabs and walls
- Setting out the ancon fixings
- Setting out by GNSS

#### **Surveying techniques**

- As-built surveys
- Level surveys
- Surveying by GNSS and Total Stations
- Survey of the elevation of buildings
- Output surveys to AutoCAD

#### **AutoCAD**

- Morning session- Beginner level
- Afternoon session: AutoCAD for engineers

## **Job Opportunities**

Recent job advertisements in the CV Library show pay rates of up to £350 per day for setting out engineers and site engineers. Search for these roles in your area to see the potential career opportunities.

<b><u>Setting Out Engineer</u></b>  <b>£40,000 - £45,000/annum Competitive day rate considered</b>  <b>N12, Woodhouse, Greater London</b>  <b>Permanent</b>	<b><u>Setting Out Engineer</u></b>  <b>£300/day</b>  <b>E16, Custom House, Greater London</b>  <b>Contract, Temporary</b>
<b><u>Setting Out Engineer</u></b>  Salary: <b>£340/day</b>  Location: <b>BR1, Bromley Town, Greater London</b>  Job Type: <b>Temporary</b>	<b><u>Site engineer</u></b>  Salary: <b>£280 - £320/day</b>  Location: <b>City of Westminster, Greater London</b>  Job Type: <b>Contract</b>

## **Contact Us**

For more information or to enroll, please get in touch with us:

**Email:** [finchleycollege@yahoo.com](mailto:finchleycollege@yahoo.com)

**Phone:** 07974 221155, 020 8143 8970

**Website:** [www.finchleycollege.com](http://www.finchleycollege.com)

## Some of our recent Trustpilot reviews

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I recently completed the Engineering Surveying course at Finchley College, and it was a fantastic experience. The course was well-organized, very practical, and provided plenty of useful information.

I want to give special thanks to Reza, our teacher. He was brilliant, knowledgeable, and always professional. He explained everything clearly, made even the complex parts easy to understand and gave us real-world examples to help us learn. He was also very approachable and happy to answer any questions we had.

The college provided excellent equipment and hands-on training, which was very important for this type of course. The staff were also friendly and helpful whenever we needed support.

I would highly recommend Finchley College to anyone looking to study engineering surveying. It's a great place to learn and improve your skills.

**Date of experience:** 24 January 2025

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### What a pleasant experience.

Every part of this course is constructive and useful. Reza is highly knowledgeable, patient and most helpful. I would recommend Finchley College to anyone.

**Date of experience:** 04 November 2024

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### It's a really great college

It's a really great college. I'm doing there my ProQual NVQ Level 3 in Engineering Surveying. The teachers are very professional and try their best to make you understand the subject. If student struggle in some areas teacher is always trying to put an extra effort to help him to learn or understand it better. Apart from theory there are lots of practical exercises. You get full training and understanding of working with Leica Total station, dumpy, laser and digital levels, GNSS. Also it is easy to get to - just a few minutes walk from Finchley Central Station.

**Date of experience:** 08 October 2022

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### Pleased with the experience

I have recently been certified my ProQual Level 3 Diploma in Engineering Surveying at Finchley college. I am truly pleased with the experience and the help that has been provided by the team.

They are one of very few that qualify you for this certificate. If you're serious about your engineering career, Finchley college is where you start your journey.

**Date of experience:** 05 August 2024

### Just a really great course

I'm pleased with my experience at Finchley College. The tutors are excellent—knowledgeable, and genuinely passionate about surveying. I was fortunate to have 1-2-1 training which meant I got the best possible training. The course was a mix of theory and practical, which was super helpful.

Reza has a wealth of knowledge that has literally taken a lifetime to accumulate, and I am really grateful for the help and transfer of some of that knowledge.

**Date of experience:** 06 April 2024

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### **ProQual Level 3 Diploma in Engineering Surveying**

I would like to share my experience and recommendations. Recently, I archived my engineering course with Finchley College in 2024 and completed my NVQ L3 Diploma in Surveying and Engineering. Although I had been in engineering for the last ten years, I needed a formal qualification. I knew most of the things, but I still learned new techniques with the help of Reza and the college team. I am happy with the instructor and the team's experience, knowledge, and friendliness. I highly recommend attending Finchley College for your training. I have taken other courses in the past, but Finchley College training is the best and will give you deep learning in every subject of engineering and surveying. After completing the course, you should be more confident to work on your own, and at the same time, completing the course, you will be able to apply for a professional SCCS card, which no other training provider will give you this benefit. Good luck to you and the training you may choose to take.

Best Wishes.

### **Best College for set-out Engineers**

I came across Finchley College on their YouTube channel, where they've put free lecture videos. I decided to join the college and was met with friendly and knowledgeable staff. The program was flexible and adjusted for my learning needs. I was provided with online videos and ebooks, enough to cover all the aspects in order to become a set-out engineer. Arguably, I was offered more study material than the UNI I paid for way more. Having a professor so passionate about their work gave me the confidence to ask even the most trivial of questions to become a better engineer. All the students are welcome to drop by any time after graduation to ask questions that they may face in the field over their career as engineers, I can't remember any other school I've attended that welcomes past students like that. To me this is a big plus and thumbs up to Finchley College.

**Date of experience:** 24 January 2024

**Don't miss out on junior engineer or surveyor job opportunities. Please check the [CV library](#) for setting out site engineer jobs with pay rates of £200 to £350 p/d within a year or two of completing your course.**