Sheffield Hallam University

The A to Z of Careers in the Built Environment

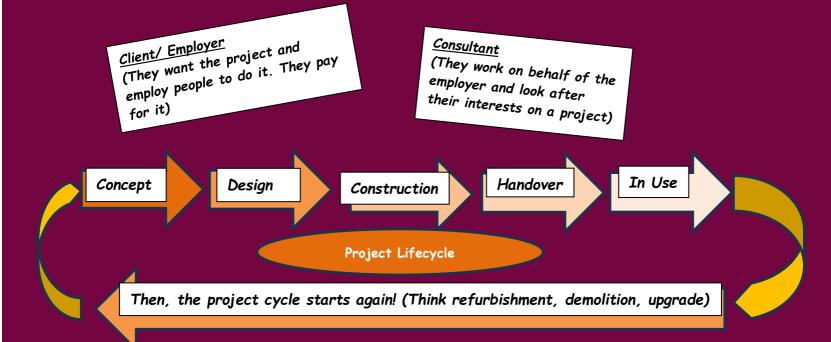


What is the Built Environment?

(clue: it's not just 'construction'!)



- It is human made surroundings that provide the setting for living!
- So; buildings, streets, parks, bridges, transportation and loads of other elements of the urban and rural landscapes.
- In short, we need the built environment to function!
- ✓ We can work for different types of companies, at different times in a project lifecycledepending on your role
- \checkmark We work on projects of varying sizes and difficulty across the UK and overseas
- \checkmark It's so diverse, there's almost a role to suit everyone!



<u>Contractor</u> (They complete the work on behalf of the employer and are site based. There's loads of different sizes and types!) <u>Sub-Contractor</u> (They work for the contractor and are site based. They are specialist contractors doing work such as electrical, structural steel, decontamination etc.)

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Please note: This booklet only covers <u>some</u> of the careers available, to give you an idea of what we do!



The average salary in one of our professional careers is **over £53,000!**

98.6% of Sheffield Hallam's Built Environment students entered work/ further study after graduating (2023 data) we are in demand!

You can earn upwards of £100,000 in a more senior position.

An extra **225,000** Construction/ Built Environment industry workers are needed by 2027 (That's in addition to those we need normally!)

The average graduate <u>starting salary</u> is £24,000 -£30,000 in the Built Environment

Construction output in the UK is over £110 billion per year.

Q: What subjects do I need to study a Built Environment Course?

A: Whatever you enjoy!

It's about having the right amount of UCAS points, so you don't have to study anything construction related at GCSE or A-level (or equivalent) - your course will teach you what you need to know!

Agency Surveyor: Commercial and Residential

Who are we?

We provide expert advice on the value of properties, market trends, and investment opportunities to support decision-making for clients.

What do we do?

Valuations- Conduct property valuations and analyse comparable sales and income potential to work out values.

Market Analysis- Stay up to date with market trends, economic patterns, and local/regional developments to provide risks/ opportunity advice.

Client Consultation- Work with clients to understand their business objectives and real estate needs, offering expert advice on property purchases/ sales. Business Support- Assist in property contracts, working closely with legal and financial teams to ensure all regulation and contract requirements are met.

Checking- Conduct thorough checks on properties, assessing their physical condition, legal status, and potential risks. Portfolio Management- Provide ongoing support in the management

of real estate properties giving advice on how to get the best performance, increasing value, and identifying opportunities for growth.

Skills:

Interest in Economics, Business Studies, Mathematics, Geography, Accounting

- Strong analytical skills and proficiency in using IT tools and software.
- Good communication and negotiation skills, with the ability to build and maintain client relationships.
- Ability to build up a detailed knowledge of a local area and the businesses and key people within it.

Degree most closely aligned:

Real Estate



Building Surveyor



Who are we?

We are the quality controllers and advisors in a project.

We assess and inspect buildings to identify any issues and offer advice to ensure buildings comply with relevant standards, building regulations, codes and look to future proof the sustainability of our buildings.

What do we do?

- ✓ Building Inspections: Of new or existing buildings to check compliance with building regulations, and safety standards.
- Regulation Compliance: Interpret and apply building regulations to ensure that construction projects meet legal requirements.
- ✓ Plan Review: Review architectural and engineering plans to verify that they are compliant.
- ✓ Sustainability Design for improving the environmental impact of the built environment.
- ✓ Accessibility Compliance: Check buildings comply and are accessible to people with disabilities.
- ✓ Quality Control: Monitor work to ensure it meets quality and safety standards.
- ✓ Building Pathology: Assess existing buildings for any structural issues, defects, and maintenance problems. Provide recommendations for repairs or improvements.
- Environmental: Advise on environmental construction practices and assess buildings for energy efficiency and environmental impact.
- Risk Assessment: Identify potential health and safety risks associated with buildings and construction sites.
- ✓ **Disputes**: Assist in resolving disputes related to building construction, compliance, or defects.
- ✓ **Contract Administration**: Negotiate and manage contracts with clients, contractors, and other members of the project team. Ensure that everyone understand their responsibilities and obligations.

Suggested Future Careers

Building Control Officer, Building Surveyor, Commercial or Residential Building Surveyor, Conservation Officer, Contract Administrator, Cost Advisor, Energy Advisor, Fire Engineering, Heritage and Conservation, Loss Adjusting, Project Management, Property Development, Retrofit Advisor, Sustainability Advisor, Traditional Buildings Specialist

Impacts you can make

- Help tackle sustainability and climate change by reducing the impact of buildings ensuring our buildings are able to meet the challenges of the future.
- Safeguard our built Heritage.
- Contribute to living in a Safe and Healthy Environment.
- Ensure buildings comply with Law and Regulations.
- Promote working on interesting and architecturally significant buildings.

Skills

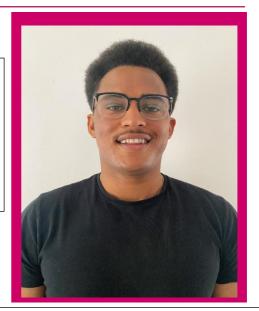
Interest in Design and Technology, Physics, History, Geography.

- > Excellent communication and interpersonal skills.
- > Inquisitive and analytical mindset with attention to technical detail and a commitment to quality.

Alumni:

Name: Jake Green Job Role: Building Control Manager Company: Assent Building Control UK Degree: Building Surveying Nr of years since leaving SHU: 3 years

Favourite thing about my job. One moment I could be working on a 50m warehouse and then next I am working on a homeowner's extension - that's what I love!





Name: Georgie Lees

ASSENT

Job Role: Building Surveyor and Project Manager Company: CSQ Carter Stephenson Quinn Degree: Building Surveying Nr of years since leaving SHU: 3 years

Favourite thing about my job: Every project is different and there is potential to work in a variety of exciting settings. From aviation, commercial, residential, industrial, and retail to name a few. It's a great career choice for those who enjoy problem solving, attention to detail and working independently. Surveyors play an essential role in the construction industry and are responsible for ensuring that buildings are safe, reliable, and fit for purpose. The job requires a combination of technical and interpersonal skills, which makes it challenging but also rewarding.

inform Name: Felix Mitchell-Hampson Job Role: Building Surveyor Company: Inform Surveying Limited Degree: Building Surveying Nr of years since leaving SHU: 3 years Favourite thing about my job: It's interesting, rewarding, you're always learning, and no two days are the same.





Name: Carrie Good Job Role: Building Control Surveyor Company: Stroma Building Control Degree: Building Surveying Nr of years since leaving SHU: 3 years



Favourite thing about my job: *The variety of different projects I* get to work on, from new care homes to multistorey office fit outs, new retail parks and brand new school campuses... and going in to work with my old dog, Seb (he's 19!)

C Construction Project Manager



Who are we?

We oversee and coordinate a project to ensure that the project is delivered successfully. We play a critical role in delivering projects on time, within budget, and to the satisfaction of all involved. An ability to coordinate various aspects of a construction project is essential for its success.

What do we do?

- ✓ **Project Planning**: Develop plans to show the project details, timeline, budget, and materials.
- ✓ Budget Management: Manage project budgets, tracking what has been spent, and reporting back.
- Scheduling: Develop project schedules and monitor progress, outlining deadlines, and critical items.
- **Kesource Allocation**: Coordinate staff, equipment, materials, and waste, to meet project requirements.
- Contract Management: Negotiate and manage contracts with clients, contractors, subcontractors, suppliers, and other members of the project team.
- Risk Management: Identify potential risks to the project and develop ways to reduce them.
- ✓ Quality Assurance: Implement and enforce quality control processes to ensure that construction meets specified standards and regulations.
- Communication: Hold regular meetings and be the main point of contact between the project team such as clients, architects, engineers, and subcontractors.
- ✓ **Issue Resolution**: Identify and solve problems, conflicts, and disputes that may arise during construction.
- ✓ Health and Safety Compliance: Ensure compliance with regulations and standards. Introduce safety procedures to protect workers and prevent hazards.
- **V** Documentation: Maintain accurate project records, including contracts, changes, and progress reports.
- ✓ **Project Closeout**: Coordinate the handover of the project once finished, including final inspections.

Suggested Future Careers

BIM Manager, Construction Project Manager, Client/ Consultant Project Manager, Design Manager / Coordinator, Facilities Manager, Health and Safety Manager, Joint Venture Advisor, Project Planner, Programmer, Site Engineer, Site Manager, Site Supervisor, Sustainability Consultant, Transport Consultant, Yield Analyser

Impacts you can make

- Be part of building a sustainable future.
- Contribute to improving the quality of life of people.
- Help the team to convert their great design from digital to reality.
- Lifelong output- even your children can see the buildings you've worked on!
- Use your skills overseas working on international projects.

Skills

Interest in Construction, Design and Technology, Business Studies, Geography, Psychology

- > Excellent communication, negotiation, and leadership / management skills.
- > Proficiency in using IT software and tools.

Alumni:

Name: Codeu Millward Job Role: Managing Director CBM DEVELOPMENTS Company: CBM Developments Degree: Construction Project Management Nr of years since leaving SHU: 6 years Favourite thing about my job: Growing a business which is also my passion, and seeing the end product produced for the client. Working closely with diverse teams and contributing to the local infrastructure.





Name: Katy Robinson

Job Role: Senior Project Manager and Co-founder of the Yorkshire Region of the National Association of Women in Construction Company: East Riding of Yorkshire Council Degree: Construction Project Management Nr of years since leaving SHU: Part time final year student Favourite thing about my job: Running a campaign on women's personal protective equipment across the industry.

. Turner & Townsend

Name: Mules Etienne Job Role: Assistant Project Manager Company: Turner & Townsend Degree: Architectural Studies with modules in Construction Project Management Nr of years since leaving SHU: 1 year Favourite thing about my job: I am working as Assistant Project Manager

and Supervisor and enjoy contributing to the project's success. I am enjoying all of the learning opportunities the role has and providing solid project management assistance.





Name: Lydia McGuinness Job Role: Site Manager Company: Wates Construction Degree: Construction Project Management Nr of years since leaving SHU: 4 years Favourite thing about my job: *My* favourite project is still my very first project – the helipad at the Northern General Hospital. My grandma was getting treated there at the time!



D Dispute Resolution Consultant

Who are we?

We manage and resolve conflicts that arise during construction projects.

We are experts in construction law, industry practices, and negotiation and look to get a fair solution to disputes, minimising any delays and financial impact.

What do we do?

Dispute Analysis: Review the construction contracts and project documents to identify the areas of dispute. Mediation and Negotiation: Act as a mediator between everyone involved in construction disputes, to reach acceptable agreements.

Arbitration Support: Provide support if the dispute goes to court, including preparing documents, organising expert witnesses, and presenting evidence.

Claim Evaluation: Evaluate claims submitted, assessing if they have a case.

Advice: Develop and recommend strategies to prevent disputes. Offer advice on the most appropriate dispute resolution methods for each case.

Consultation: Understand objectives, concerns, and expectations regarding dispute resolution and work with project managers, engineers, and legal experts to analyse the impact of claims on project timelines and costs. **Reporting:** Prepare clear reports documenting dispute resolution processes, outcomes, and recommendations.

Skills:

Interested in Law, History, Politics, Psychology, Economics

- Strong communication and interpersonal skills, able to hold sensitive negotiations.
- Analytical mindset and attention to detail, with the ability to review, assess, evaluate, and report on key information.

Degree most closely aligned:

Quantity Surveying

Name: Jack Hadfield

Job Role: Quantity Surveyor (Main Contractor's QS for a Self-Build Contractor / Developer) Company: Renaker Build Limited Degree: Quantity Surveying Degree with sandwich placement year Nr of years since leaving SHU: 9 years Favourite thing about my job: Working on the tallest

and most exciting projects in Manchester. No day is the same as I can be based on site and working with Clients, Designers, Construction Managers, Sub-Contractors, and End Users and also contributing to the detailed design process during the employment of Sub-Contractors.

E Estimator

Who are we?

We calculate the costs associated with a construction project. Our main role is to estimate the expenses involved in materials, labour, equipment, and other things needed to complete a construction job.

What do we do?

We will work for a contractor/ sub-contractor and do: **Review of project documents:** Examine specifications, drawings, and other documents to understand the type and size of work required. **Measurement:** Measuring and quantifying all the materials, labour, and equipment needed for the works and produce a costing document for pricing. **Cost Estimates:** Calculate the total cost of the project, including direct and indirect costs. **Bid Preparation:** Assist in the preparation of proposals for contractors looking for work on construction projects. **Risk Analysis:** Identify risks and uncertainties in the construction project that may impact costs. **Updates and Maintenance of Records:** Keep records for contractors and the presented of the cost of the **Cost Estimates and Maintenance of Records:** Keep records

of estimates, pricing data, and historical cost information for future reference and analysis.

Skills:

Interested in Maths, English, Design and Technology, Business Studies, ICT

- Analytical skills and mathematical proficiency are essential for calculating quantities, measurements, and cost estimates. A keen eye for detail is crucial to ensure that all elements of a project are considered in the estimation process.
- Effective communication is vital for along with knowledge of construction materials and methods

Degree most closely aligned:

Quantity Surveying



F Fire Protection Officer

Who are we?

We ensure compliance with fire safety regulations, implementing fire prevention measures, and overseeing fire protection systems within buildings.

What do we do?

Fire Safety Inspections: Conduct regular fire safety inspections to assess compliance with relevant codes and regulations. Identify and report any fire safety hazards or violations.

Advisory Work: Evaluate building designs to ensure that fire safety measures are incorporated from the initial stages of construction or renovation.

Fire Protection System Evaluation: Assess and review the design and installation of fire protection systems, including fire alarms, sprinklers, smoke detectors, and emergency exits. Issuing Fire Safety Certificates: Issue fire safety certificates or permits upon successful inspection and verification of compliance. Recommend corrective actions for non-compliant buildings.

Emergency Evacuation Planning: Assist in developing and reviewing emergency evacuation plans for buildings. Fire Risk Assessments: Conduct fire risk assessments to identify potential hazards and vulnerabilities. Recommend measures to mitigate identified risks and improve overall fire safety.

Fire Incident Investigation: Investigate fire incidents within buildings, analysing the causes and contributing factors. Design: Propose enhancements to building design and construction practices to enhance fire safety.

Skills:

Interested in Physics, Engineering, Design and Technology, ICT, Law

- Need good communication and interpersonal skills with an analytical mindset with attention to detail. Focus on safety and ability to work independently as well as in a team.
- Attention to detail.
- Problem-solving skills.
- Proficiency in using IT software and tools.

Degree most closely aligned:

Building Surveying



G

General Practice Surveyor

Who are we?

We have a diverse range of responsibilities related to valuation, management, and development of various types of properties.

What do we do?

Property Valuation: Conduct property valuations for a variety of purposes, including sales, purchases, taxation, and financial reporting.

Property Management: Manage and oversee the day-to-day operations of properties on behalf of owners or investors.

Advisory: Provide advice on matters including rent reviews, renewals, and restructuring. Negotiate terms and conditions on behalf of landlords or tenants. Acquisitions and Disposals: Assist clients in acquiring or disposing of properties.

Building Surveys and Inspections: Conduct building surveys to assess the condition and structural integrity of properties.

Energy Performance Certificates (EPC): Arrange for and provide energy performance certificates for properties, ensuring compliance with regulatory requirements.

Environmental Impact Assessments: Assess and advise on the environmental impact of property development projects ensuring compliance with environmental regulations.

Skills:

Interested in Economics, Geography, Business, Environmental Issues

- Need good communication and negotiation skills, with ability to build and maintain client relationships.
- Strong analytical skills and proficiency using IT tools and software.
- Ability to build up a detailed knowledge of a local area and the businesses and key contacts within it.

Degree most closely aligned:

Real Estate, Building Surveying



Name: Savas Bulduk Job Role: Chartered Building Surveyor Company: Dabinett Limited Degree: Building Surveying Nr of years since leaving SHU: 2 years

Favourite thing about my job: It has to be how diverse my days can be. Each project is unique in itself, the differences between residential, commercial and industrial styles of surveying and being in a wide range of locations across the UK gives my job lots of variance. I've had the opportunity to visit many places I would not necessarily have been throughout my time in industry. The socials and networking events are a big plus too!

Heritage Consultant

Who are we?

We specialise in the preservation, conservation, and management of historic and culturally significant buildings. We ensure that heritage assets are protected, maintained, and adapted correctly for modern day use.

What do we do?

Heritage Assessments: To determine the Historical significance of buildings and structures. Legal Compliance: Understand heritage preservation laws, regulations, and guidelines. Condition Surveys: Perform detailed condition surveys of heritage buildings to identify defects. **Conservation Planning**: Development of conservation/ management plans for heritage sites. Materials Analysis: Investigate construction materials used in heritage buildings. Conservation Engineering: Work with engineers and other professionals to address structural issues while preserving the heritage value of buildings. Architectural Design and Planning: Work with architects and designers to get modern facilities into heritage buildings. Retrofit Advisors: Advise clients on improving the environmental impact of heritage assets.

Skills:

Interested in History, Design and Technology, Geography, Law, and Environmental Issues.

- Need good social and interpersonal skills.
- Attention to detail. •
- Research skills •
- Inquisitive mindset and problem-solving skills.
- Interest in heritage buildings and historical techniques.

Degree most closely aligned:

Building Surveying

Name: Jason Street Job Role: Assistant Project Manager Company: Rider Levett Bucknall Degree: Construction Project Management Nr of years since leaving SHU: 1 year Favourite thing about my job: is working on a variety of interesting/highvalue/high demand schemes and the variety/freedom of my role Interesting fact about what I do: is working on a variety of interesting/high-value/high demand schemes and the variety/freedom of my role

Investment Strategy Development

Manager

Who are we?

We develop and implement real estate investment strategies to meet with the financial goals of clients. We monitor performance of real estate investments and make adjustments based on market conditions.

What do we do?

Due Diligence: Assess the financial and legal suitabilities of properties for investment. Financial Analysis: Do financial modelling and analysis to assess the potential return on investment.

Risk Management: Identify and analyse risks associated with real estate investments. Acquisitions and Dispositions: Oversee the purchase and sales of real estate assets. Valuation: Conduct property valuations to determine current market values. Feasibility Studies: Perform feasibility studies for potential development projects or renovations. Market Intelligence: Stay up to date with market trends, economic indicators, and industry developments.

Skills:

Interested in Economics, Business, Finance, Mathematics, Geography.

- Need good communication and negotiation skills, with ability to build and maintain client relationships.
- Strong analytical skills and proficiency using IT tools and software.
- Ability to build up a detailed knowledge of particular market sectors.

Degree most closely aligned:

Real Estate

RLB

Rider



J Joint Venture Advisor

Who are we?

We bring together partnerships between public and private companies within the construction sector, such as when companies work together on a large-scale project.

What do we do?

Strategic Partnership Identification: Conduct market research to identify potential joint venture partners in the public and private construction sector.

Feasibility Analysis Assess the financial, operational, and legal feasibility of joint ventures.

Negotiation and Deal Structuring: Lead negotiations with potential partners to establish terms, conditions, and structures for joint ventures.

Relationship Building: Build strong relationships with key people, government bodies, and private companies involved in the construction sector.

Risk Management: Develop risk strategies for addressing potential challenges and uncertainties.

Performance Monitoring: Track the progress of joint venture projects. Conduct regular reviews to assess the effectiveness.

Skills:

Interested in Business, Design and Technology, geography, Law, and Economics.

- Need negotiation and relationship building skills, including finding things in common.
- Effective communication including written and giving presentations.
- Keen eye for business and project feasibility.

Degree most closely aligned:

Construction Project Management

KPI Analyst (Key Performance Indicator Analyst)

Who are we?

K

We focus on measuring and improving project efficiency and outcomes. We look at the ongoing improvement of construction projects, financial performance, and overall productivity within the organisation.

What do we do?

Define Goals: Identify and define relevant key performance indicators for construction projects. Data Collection: Collect and gather data related to construction projects, financial performance, and other relevant data. Performance Measurement: Evaluate project progress, cost efficiency, and other relevant factors such as quality. Client Satisfaction: Develop KPIs related to client satisfaction and feedback. Contractual Compliance: Monitor and assess compliance with contracts. Communication and Reporting: Communicate results and analysis to the project team. Technology Utilisation: Use technology tools and software for data analysis and reporting.

Skills:

Interested in ICT, Business, English, Law, and Economics

- Need a keen eye for detail with strong problem solving and analysis skills.
- Effective communication, including written reports.
- Appetite for continuous learning.

Degree most closely aligned:

Quantity Surveying





Name: Robert Butterwick

Job Role: Estimator Company: Cambridge Hok Construction Degree: Quantity Surveying

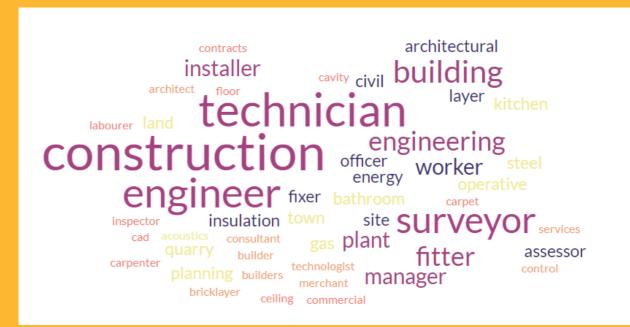
Nr of years since leaving SHU: 10

Favourite thing about my job: The different project you can work on. I've recently left a 6 year spell in housebuilding to return to a construction environment, what I am enjoying again is using the skills such as preparing bills of quantities & measurement that I learned on the course & what I most enjoyed along with learning about material science. I am currently working on a 44,000 m2 Strawberry farm just outside Boston, Lincolnshire!



"Built environment graduates address one of the UK's key areas of occupational shortage. There are jobs all over the country, and at present we are not training enough to meet demand. They are some of the most employable degrees around and many new technologies, in green industries especially, will need specialists'" Charlie Ball

Head of Labour Market Intelligence, Jisc Services Limited



Loan/Fund Monitor

I.

Who are we?

We work on behalf of those who are paying for the project, checking that construction projects are financially sound, progressing according to plan, and complying with all relevant contractual requirements.

What do we do?

Project Checks: Conduct checks on proposed construction projects and budgets to assess if they are feasible. Financial Risk Assessment: Assess financial risks associated with the construction project, including potential cost overruns, delays, and unforeseen expenses. Fund Payment Approval: Evaluate requests for loan/ fund payment from the borrower or project owner. Site Inspections: Conduct regular site inspections to assess the actual progress of construction work. Progress Reporting: Prepare detailed progress reports. Changes Assessment: Review and assess changes to the original proposed work. Quality of Work Inspection: Assess the quality of construction work to ensure it meets industry standards. Contract Compliance: Ensure that the construction project is in line with the contract. Dispute Resolution: Help to resolve any disputes which may occur.

Skills:

Interested in Law, Accounts, ICT, Economics, Business Studies

- Need a keen eye for detail, good with numbers and analysing information.
- Good communicator to all the project team, including with written reports.
- Understanding of risk and legal issues.

Degree most closely aligned:

Quantity Surveying

Μ

Mapping (Thermal/Geographical) Surveyor

Who are we?

We use advanced surveying techniques to look at 3D and thermal data to assess buildings and structures to understand how they work so we can improve them.

What do we do?

Thermal Imaging Surveys: Conduct surveys using infrared technology to spot differences in temperature on buildings surfaces. Identify areas of heat loss, insulation issues, or potential structural anomalies. Geographical Information Systems (GIS): Utilize GIS

technology to collect, manage, and analyse geographical data related to buildings and structures. Building Condition Assessments Perform building condition

assessments using thermal and geographical data. Energy Efficiency Analysis: Evaluate the energy efficiency of buildings by analysing thermal data.

Environmental Impact Studies Conduct studies to assess the environmental impact of buildings. Renewable Energy Assessments: Assess the suitability of buildings for renewable energy installations.

Historic Building Preservation: Use mapping technology to document and preserve historic buildings.

LiDAR (Light Detection and Ranging) Surveys: Use LiDAR data for terrain modelling and flood risk assessments.

Skills:

Interested in Geography, Maths, Physics, Design and Technology, Biology

- Good with data collection and analysing information.
- Can visualise 3D structures.
- Good communicator to show findings of the surveys.

Degree most closely aligned:

Building Surveying

Net Zero Buildings **Specialist**

Who are we?

We focus on the design, construction, and assessment of buildings with the goal of achieving net-zero energy consumption.

What do we do?

Energy Audits: Assess the current energy consumption and efficiency of buildings and identify areas for improvement. Net Zero Design Consultation: Provide expertise during the design phase of new buildings or renovations.

Renewable Energy Design: Review renewable energy sources such as solar panels, wind turbines, or geothermal systems and incorporate these into building designs.

Energy Modelling Utilize energy modelling software to simulate and analyse the energy performance of buildings. Life Cycle Assessment: Conduct life cycle assessments to evaluate the environmental impact of building materials and construction processes.

Smart Building Technologies Recommend smart building technologies for energy monitoring and control.

Carbon Footprint Reduction: Develop strategies to reduce the carbon footprint of buildings. Policy and Regulation Compliance: Stay updated

on energy efficiency regulations and ensure compliance.

Post Occupancy Evaluation: Conduct evaluations to assess the actual energy performance of completed buildings.

Skills:

Interested in Sciences, Geography, ICT, Environmental Issues

- Skilled in problem identifying and solving.
- Works well with others towards a common goal.
- Strong analysis skills and can communicate well with others

Degree most closely aligned:

Building Surveying

Name: Eliza Smith

Job Role: Graduate Building Surveyor Company: Rider Levett Bucknall Degree Building Surveying

Nr of years since leaving SHU: 1 year

Favourite thing about my job: Watching a concept become reality and seeing every stage of the works is why I love the job I do. Getting to work on a multitude of different projects, allowing me to work alongside many skilled professionals and broadening my network.

Interesting fact about what I do: No two days are the same, the variety of work I am able to be a part of; from Minor Works Projects to Clerk of Works on large scale new builds, allowing me to always grow and develop. Building Surveying as a career has continued learning and development, as our industry develops to fit into the sustainable future, we are all striving for.

Option Appraisals (Feasibility)

Who are we?

We evaluate and analyse various construction options or alternatives for a project during its early stages. This involves assessing the feasibility, cost implications, and potential risks associated with different options.

What do we do?

Feasibility Studies Conduct feasibility studies for proposed construction projects to assess different options Cost Estimates: Prepare cost estimates for each option, considering, materials, labour, and associated expenses. Risk Assessment: Identify and assess potential risks associated with each option. Site Analysis Analyse site-specific conditions that may impact the feasibility of different options. Sustainability Considerations Consider the environmental impact of each option. Market Analysis Conduct market analysis to understand the demand for the proposed project. Client Consultation: Consult with clients to understand their preferences and priorities. Cost-Benefit Analysis Perform cost-benefit analyses to compare the financial returns and benefits of each option.

Skills:

Interested in Economics, Business, Design and Technology, ICT, English

- Good analysis skills and understanding of value.
- Can communicate well with others.

Rider

RLB

Awareness of risks and problem solving.

Degree most closely aligned:

Quantity Surveying



Planner (Construction)

Who are we?

We are responsible for planning and scheduling various elements of a construction project. We create a detailed project plan, outlining the activities, resource allocation, and timelines and keep these updated if there is a change.

What do we do?

Project Planning: Develop a detailed plan that outlines the work and deliverables of the construction project. **Work Breakdown Structure (WBS)**: Create a Structure that

breaks down the project into smaller, manageable tasks. Scheduling: Develop a schedule that includes start and finish dates for each task or activity.

Software Use scheduling software to create Gantt charts or other visual representations of the project timeline. Resource Allocation: Work out the resources required for each task, including labour, equipment, materials, and subcontractors.

Critical Path Analysis: Identify the crucial tasks in the project, which will determine the project's overall duration.

Change management: Update the programme following any changes or delays to show the actual new timeline. Expert Advice: Offer advice in a dispute situation regarding the effect of delays to programme following changes to the contract.

Skills:

Interested in ICT, Business, Psychology, Design & Technology

- Methodical and logical thinking skills and responsive to change,
- Effective team worker.
- Keen eye for detail and good written presentation
- Skilled in problem identifying and solving.
- Good time management skills

Degree most closely aligned:

Construction Project Management



New helipad at the northern general hospital (Wates)

Quantity Surveyor



Who are we?

We are the cost managers of construction!

Our primary focus is on managing the financial aspects of construction projects from start through to completion.

What do we do?

- ✓ Cost Estimation: Prepare estimates for construction projects based on architectural drawings and other documents.
- ✓ Budgeting: Set and manage/ monitor budgets, ensuring that they meet with the project's financial needs.
- Measurement: Measure the construction works needed by reviewing the architect plans and create a document for costing up the works.
- Procurement: Prepare and organise documents to send to the contractors so they can submit a bid to undertake the works. Decide who should do the work.
- Contract Administration: Manage construction contracts, including preparing the contract documents and changes.
- ✓ Risk Management: Identify, assess, and manage potential risks that may impact project costs.
- ✓ Cash Flow Management: Manage payments, ensuring that money is available when needed.
- ✓ Cost Reporting: Produce cost reports to highlight any changes between predicted and actual costs.
- ✓ Dispute Resolution: Assist in the resolving of disputes related to project costs and contracts. Providing expert advice in case of disagreements.
- ✓ Sustainability: Promote environmentally-friendly construction methods and materials.
- ✓ Evaluation: Assess the actual costs and performance of completed projects.
- Professional Consultation: Act as a consultant to clients, architects, contractors, and others on matters related to construction costs, financial management and legal matters.

Suggested Future Careers

Buyers, Claims Specialists, Commercial Directors, Commercial Managers, Contract Managers, Cost Managers, Employers Agents, Estimators, KPI Analysts, Legal / Expert Witnesses, Loan (fund) Monitors, Options Appraisal Surveyors, Procurement Managers, Project Managers, Quantity Surveyors, Sustainability Assessors, Supply Chain Managers

Impacts you can make.

- Ensure 'value for money' buildings are constructed.
- Being part of the team improving the environment.
- Be proud of the buildings and structures we create for everyone to use and enjoy.
- Turn an abandoned site into a new building.
- Use your skillset in the UK and overseas!

Skills

Interests in Mathematics, Business Studies, Economics, Law, Design & Technology

Good numeracy skills, analytical logic with a keen attention to detail. Communication, negotiation, and problem solving are core qualities along with IT proficiency and knowledge of software use.

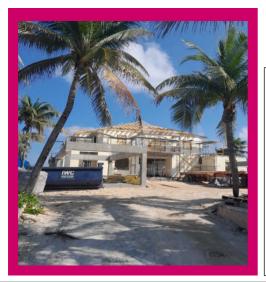
Alumni:

Name: Rebecca Kilby MRICS Job Role: Associate Director Company: WT Partnership Degree: Quantity Surveying Nr of years since leaving SHU: 8 Years



Favourite thing about my job: *I now sit on my company's training and development board and am responsible for supporting the team to become chartered. I find this extremely rewarding being able to mentor and support our staff through the process and also get the opportunity to prepare and deliver training to the staff at WT on best practice and key issues within the industry.*





NCB Group

responsibility.

Name: Joshua Tippett Job Role: Quantity Surveyor Company: NCB Group Cayman Degree: Quantity Surveying Nr of years since leaving SHU: 4 years Favourite thing about my job: <u>Working in the</u> <u>Caribbean!</u> It also has to be working in a team environment with other construction professionals with the aim of achieving the same goal. The knowledge shared and gained when working within a team gives a broad experience and skillset. Working together towards a successful project gives the job a sense of purpose and



Name: Pharys Nasser MCInstCES Job Role: Quantity Surveyor Company: Balfour Beatty Degree: Quantity Surveying Degree Nr of years since leaving SHU: 6 years Favourite thing about my job: No day is ever the same, you could be in a place where you have 'mastered the arts,' but then you are hit with totally new site issue. The construction/civil engineering industry is a constant learning job with loads of change, and I love that challenge.



M MOTT MACDONALD



Balfour Beatty

Name: Chloe Hartley MRICS Job Role: Quantity Surveyor & Carbon Estimating Management Lead Company: Mott MacDonald

Degree: Degree Apprenticeship in Quantity Surveying (Chartered Surveyor) Nr of years since leaving SHU: 2 years

Favourite thing about my job: - I love being part of a team that helps clients deliver their projects. I enjoy the range of deliverables that I am involved with. From cost estimating to populating risk registers to contract management to evaluating progress made on site means no day is the same. Additionally, I love seeing the end users of my projects enjoy the buildings we have worked so hard to deliver. As carbon estimating lead I ensure the growth of the carbon estimating practise within MM and work with our clients to help them reach their Net Zero goals.

R Real Estate Surveyor



Who are we?

We analyse the value of buildings and land.

Our focus is to provide expert guidance and information that enables clients to make informed decisions about property.

What do we do?

- ✓ Property Valuation: Working out the market value of properties for reasons such as sales, finance, tax, or insurance.
- ✓ Land and Site Analysis: Assessing the opportunities and challenges of sites, for potential development or use.
- ✓ Market Research: Researching local market trends, property values, and factors influencing supply and demand.
- ✓ **Feasibility Studies**: Assessing the feasibility of developments, considering any economic, legal, and environmental aspects.
- ✓ Property Management: Overseeing the day-to-day operations, leasing, and maintenance of properties on behalf of property owners.
- ✓ Investment Analysis: Analysing investment opportunities, assessing risks and returns.
- Rental Management: Managing rentals, including negotiation and preparation of agreements between landlords and tenants.
- ✓ Due Diligence: Identifying any legal, financial, or physical issues that may impact a property value or use.
- ✓ Land Use Planning: Advising on the best use of land based on regulations, environmental considerations, and market demand.
- ✓ **Negotiation**: Negotiations for property transactions, whether buying, selling, or leasing.
- Development and Regeneration: Contributing to the planning of development and regeneration projects to enhance the value and give wide social and environmental benefits.
- ✓ Legal and Regulatory Compliance: Ensuring that activities comply with relevant laws, regulations, and ethical standards.
- ✓ Client Consultation: Plan, develop and regenerate sites and whole areas of cities and towns.

Suggested Future Careers

Property Development, Property Advisory, Property Manager, Agency (selling and letting property), Commercial Lettings Management, Fund Manager (property investments), Commercial Property Surveyor, Residential Property Surveyor, Valuation Surveyor, Management Consultancy Surveyor, Corporate Real Estate Surveyor

Impacts you can make

- Benefit society as a whole, creating places to live, work and have fun in.
- Create wealth which helps the national and global economy to function.
- Give new life to run-down areas of towns and cities.
- Improve the environment, making development and existing properties sustainable.
- Help someone realise their property dreams, such as buying their first house.

Skills

Interested in Business and Finance, Economics, Mathematics, Geography, English

- Excellent analytical, negotiation, and communication skills. Proficient in using IT software and tools.
- > Ability to work independently and as part of a collaborative team.

Alumni:

Name: Yasmine Lunn Job Role: Development Manager Company: Harworth Degree: Real Estate Nr of years since leaving SHU: 6 years Favourite thing about my job: No day is the same and working with such a large variety of people. Creating communities and placemaking and turning vision into reality.

Harworth







Name: Thomas Campbell Job Role: Chartered Surveyor Company: Eddisons - Cambridgeshire Degree: Real Estate Nr of years since leaving SHU: 6 years Favourite thing about my job: The commercial team undertakes valuations for banks, pension funds, national and local companies and private individuals for lending, accounting, and financial purposes across the East of England. I thoroughly enjoy my day to day job and the best aspect I think, is that every day is different.

Name: Ife Akintokun Job Role: Development Associate Company: Packaged Living Degree: Real Estate Nr of years since leaving SHU: 6 years About my job: I am working for the UK's leading sustainable living specialist spanning investments in an development of best class rentals in the UK







CBRE

Name: Ellie McCollin

Job Role: Surveyor in Office Agency Team Company: CBRE - Leeds Degree: Real Estate

Nr of years since leaving SHU: **3 years**

Favourite thing about my job: My role at CBRE involves acquisitions and disposals on a leasehold and freehold basis for commercial properties - predominantly offices. On a day to day basis, I carry out inspections, viewings, measurements, and provide clients with marketing reports and recommendations. I mostly enjoy the variety within my job as it's a good mixture of working in the office at my desk, attending meetings and being out and about on site.

Risk Management

Who are we?

We assess potential risks and uncertainties that may impact the project and develop contingency plans and strategies to mitigate schedule risks.

What do we do?

Progress Monitoring: Implement systems to monitor the progress of each task or activity. Regularly update the project schedule based on actual progress.

Communication: Communicate the project schedule and timelines to all. Ensure that everyone involved understands their roles and responsibilities.

Collaboration with Project Teams: Work closely with architects, engineers, contractors, and others. Cost Management: Collaborate with the project's cost estimator to align the schedule with the budget.

Quality Assurance. Integrate quality control and assurance activities into the project schedule.

Material Management: Coordinate the purchase of materials and equipment in alignment with the project schedule. Reporting: Provide regular updates to project teams on the progress of the project. Address any deviations from the schedule and propose solutions.

Change Management: Evaluate and manage changes to the project that may impact the schedule.

Lessons Learned Analysis: Conduct a thorough analysis at the end of the project to identify lessons learned and areas for improvement in future.

Skills:

Interested in Business, Design & Technology, Economics, ICT

- Skilled in identifying potential problems and offering solutions.
- Keen eye for detail and analysis with strong ICT skills.
- Very good communicator.

Degree most closely aligned:

Quantity Surveying/ Construction Project Management

S

Sustainability Consultant

Who are we?

We are at the forefront of applying environmentally aware practices, ensuring that construction projects align with sustainable principles.

What do we do?

Sustainable Project Planning: Plan sustainable practices into the project, such as energy efficiency, resource conservation, and waste reduction.

Energy Efficiency Analysis: Conduct energy efficiency assessments for the project including design. Materials Selection: Advise on the selection of environmentally friendly and sustainable building materials. Waste Management: Develop and implement a waste management plan to minimise construction waste. Water Conservation: Include water conservation measures, such as low-flow fixtures, rainwater harvesting, and efficient irrigation systems.

Biodiversity and Landscape Design: Work with landscape architects to integrate biodiversity-friendly landscaping and green spaces into the project design.

Carbon Footprint Reduction: Develop strategies to reduce the carbon footprint of the construction process.

Environmental Impact Assessments: Conduct assessments to evaluate the environmental impact of construction activities. **Compliance with Green Building Codes:** Ensure compliance with local green building codes and regulations.

Skills:

Interested in Sciences, Geography, ICT, Environment.

- Skilled in problem identifying and solving.
- Research skills.
- Data analysis.
- Critical thinking skills.
- Works well with others towards a common goal.
- Strong analysis skills and can communicate well with others.

Degree most closely aligned:

Construction Project Manager/ Building Surveyor

Travel/ Transport Consultant

Who are we?

We focus on incorporating sustainable and efficient transport solutions into construction projects.

What do we do?

Transport Planning Develop detailed transport plans for construction projects, considering access points, traffic flow, and logistical requirements.

Traffic Impact Assessments: Conduct traffic impact assessments to understand and reduce the potential effects of construction activities on local traffic.

Public Transport Integration: Include public transport options in the project design, encouraging the use of buses, trains, or other modes.

Construction Traffic Management: Develop strategies for managing construction-related traffic, including the staging of deliveries, parking arrangements, and temporary road closures. **Accessibility Compliance**: Ensure compliance with accessibility standards, including provisions for individuals with disabilities.

Environmental Impact Reduction: Develop initiatives to reduce the environmental impact of transportation associated with the construction project.

Smart Transportation Technologies Explore and implement smart technologies to enhance transportation efficiency. Traffic Safety Measures Implement measures to enhance safety for both construction workers and the general public.

Skills:

Interested in Sciences, Geography, ICT, Design and Technology, Environmental Issues

- Skilled in problem identifying and solving.
- Works well with others towards a common goal.
- Strong analysis skills and can communicate well with others.

Degree most closely aligned:

Construction Project Management

Urban Estate Surveyor

Who are we?

Sometimes referred to as Urban Property Surveyors or Urban Land Surveyors. We manage the development and valuation of real estate within urban areas.

What do we do?

Valuation of Urban Properties: Conduct valuations to determine the market value of urban real estate. Feasibility Studies: Perform feasibility studies for urban development projects to assess the viability of proposed real estate developments. Land Use Planning: Work with urban planners to assess the most suitable land uses for urban areas. Property Management: Manage urban properties on behalf of clients or property owners. Land Acquisition and Disposal: Identify and acquire suitable land for development or investment. Market Research: Conduct market research to stay informed about urban real estate trends. Urban Regeneration: Contribute to urban regeneration projects by identifying areas for redevelopment or revitalisation. Negotiation and Deal Structuring: Negotiate property deals

on behalf of clients, whether buying, selling, leasing, or managing. Environmental Impact Assessment: Assess the

environmental impact of urban development projects.

Skills:

Interested in Economics, Geography, Business, Sociology

- Good communication and negotiation skills, with ability to build and maintain client relationships.
- Strong analytical skills and proficiency using IT tools and software.
- Ability to build up a detailed knowledge of a local area and the businesses and key people within it.

Degree most closely aligned:

Real Estate

Valuation Surveyors

Who are we?

We specialise in deciding the market value of real estate properties.

What do we do?

Property Valuation: Conduct assessments of the market value of properties, taking into account factors such as location, size, condition, and comparable sales.

Market Research: Stay informed about local and regional real estate market trends, economic conditions, and factors influencing property values.

Inspection: Physically inspect properties to assess their condition, features, and any unique characteristics that may impact value.

Measurement: Measure and record the property dimensions. **Financial Analysis:** Consider financial factors that may affect property value, including rental income,

Development Appraisals: Assess the value of land or properties for development purposes, considering potential costs, returns, and market demand.

Legal Support: Provide expert witness testimony and support in legal disputes related to property values.

Environmental Factors: Consider environmental factors that may impact property values, such as energy efficiency, green certifications, and eco-friendly features.

Skills:

Interested in Economics, Geography, Business, Environmental Issues

- Good communication and negotiation skills, with ability to build and maintain client relationships.
- Strong analytical skills and proficiency using IT tools and software.
- Ability to build up a detailed knowledge of particular market sectors.

Degree most closely aligned:

Real Estate

Wall (Party) Surveyor

Who are we?

We look after the rights and responsibilities of property owners when construction work is carried out near a shared boundary to make sure no damage is done to a neighbouring structure.

What do we do?

Party Wall Agreement: Assist with the creation of Party Wall Agreements for those planning construction work that may affect a shared party wall or boundary.

Initial Assessment: To determine whether the proposed construction work falls within the scope of the Party Wall Act. Inspections and Surveys: Conduct surveys of the affected properties to assess the current condition of the party wall and adjacent structures.

Serve Notices: Serve legal notices on neighbouring property owners.

Negotiation and Resolution: Negotiate with neighbouring property owners to reach an agreement on the proposed work, ensuring potential disputes are resolved.

Documentation: Prepare detailed records, including photographs, to document the state of the properties before construction work begins.

Site Monitoring: Monitor construction work to ensure that it sticks to the terms of the Party Wall Agreement and does not cause unnecessary damage.

Skills:

Interested in Sciences, Geography, ICT, Law, Design and Technology

- Strong analysis skills and can communicate well with others.
- Problem-solving skills.
- Attention to detail.
- Good attention to detail and written skills.
- Communication skills and ability to build relationships.

Degree most closely aligned:

Building Surveying

X-Ray & Non-Destructive Testing (NDT) Consultant

Who are we?

We specialise in using advanced technologies to assess the structural integrity and condition of buildings.

What do we do?

Structural Assessment: Use X-ray methods to assess the structural integrity of buildings to identify hidden defects or weaknesses that may not be visible through visual inspections. X-Ray Imaging: Conduct X-ray imaging to examine structural elements such as walls, floors, and columns for hidden issues. Ultrasonic Testing: Use ultrasonic testing to evaluate the thickness of building materials and detect anomalies or variations in material density.

Thermal Inspection: Perform inspections to identify changes in temperature that may indicate insulation issues, water, or electrical problems.

Concrete Testing: Use methods, such as ground-penetrating radar (GPR), to assess the condition of concrete structures. **Material Analysis:** Conduct material analysis using X-ray fluorescence (XRF) to work out the make up of building materials.

Corrosion Assessment: Assess the extent of corrosion in metal components, such as steel beams or reinforcement.

Reports: Prepare detailed reports outlining the condition of the building, identified issues, and recommendations for corrective actions.

Skills:

Interested in Geography, Maths, Physics, Design and Technology, Biology

- Good with data collection and analysing information.
- Can visualise 3D structures.
- Attention to detail.
- Good communicator to show findings of the surveys.

Degree most closely aligned:

Building Surveying

Yield Analyser

Who are we?

Sometimes called an Efficiency Analyst, we look after the efficiency of construction processes, making sure we get the best use of workflows, and resource utilisation within a project.

What do we do?

Process Evaluation: Analyse construction processes to identify inefficiencies and bottlenecks. Evaluate the workflow from project initiation to completion. Resource Utilisation: Assess the usage of resources, including manpower, equipment, and materials. Performance: Establish key performance indicators (KPIs) to measure and track project performance. Workflow Optimisation Manage construction workflows to reduce delays and improve project timelines. Cost Efficiency: Evaluate expenses to identify opportunities for cost savings. Quality Management: Review construction quality control processes to ensure standards are being met. Risk Assessment: Conduct risk assessments to identify potential risks that could impact project returns. Collaboration Enhancement: Help with effective communication and co-working among project teams. Technology: Explore and use technology solutions that can enhance project management efficiency.

Skills:

Interested in ICT, Business, Psychology, Design & Technology

- Good communicator and motivator of people.
- Keen eye for detail and good written presentation.
- Recognize good value and quality control.

Degree most closely aligned:

Construction Project Management

Zoo (Facilities) Manager

Who are we?

Yes- you could even work in a zoo! Every facility open to the public will need a management team looking after the estate. We, as facilities managers, ensure the efficient operation of buildings and properties, looking at both planning new schemes and also day-to-day operations and maintenance.

What do we do?

Strategic Planning: Develop and implement plans for the overall management and operation of facilities.
Budget Management: Develop and manage budgets for facility operations, maintenance, and improvements.
Space Planning: Plan and optimise the use of space within facilities for maximum efficiency.
Maintenance and Repairs: Oversee routine maintenance activities and coordinate repairs as needed.
Health and Safety Compliance: Ensure compliance with health and safety regulations and standards.

Security Management: Develop security procedures to keep safe the facilities and occupants.

Technology: Manage facility management software systems, such as solutions for building automation, energy management, and maintenance tracking.

Emergency Preparedness: Develop emergency response plans for facilities.

Environmental: Implement strategies for energy efficiency. Facility Inspections: Conduct regular inspections of facilities to assess their condition and identify maintenance needs.

Skills:

Interested in ICT, Business, Geography, Design & Technology, Sociology

- Team working and motivation.
- Knowledge of services and building regulations.
- Leadership/management.
- Good organisational skills and time management.
- Communication and negotiations skills,

Degree most closely aligned:

Construction Project Management, Building Surveying, Quantity Surveying, Real Estate







Visit us and find out more!



Or email collette.king@shu.ac.uk

