

EDUCATION

Imperial College London

MEng (Hons) Civil Engineering ACGL / Year 1: 72% (1st), Overall: 1st Predicted

September 18 to June 22

1st Year Modules: Computational Methods Creative Design Drawing Energy Systems Environmental Engineering Fluid Mechanics
Geotechnics Mechanics Materials Mathematics Sketching and Modelling Surveying Structural Mechanics

Highlight Roles: Wilson Hall Committee Representative CSP Chair at City & Guilds Union Founder of Comoros Project

Concord College

A-levels: A*A*A*A*A and GCSEs: 11 A*

September 14 to June 18

A-levels: Mathematics Further Mathematics Physics Chemistry Extended Project

Competitions: RSC UK Chem Olympiad (Gold: 18) Cambridge C3L6 (Gold: 17) UKMT Maths Challenge (Gold: 14,15,16,17)
UKMT Int. Maths Olympiad (Merit: 14, 15) ESMQ Team Maths (Winning Team: 14)

Awards: Academic Scholarship (6th form) Vinspired V50 Charitable Award ESB: Speech (QCF Grade 6: Distinction)

WORK EXPERIENCE

Curtins

December 19

Intern Structural Engineer | Building Structures

- o **Designed the preliminary frame structure for a 3-storey building** to Eurocode standards by hand and modelling using **Telka**.
- o **Performed structural inspections of the redevelopment facilities** at **Roehampton University**, highlighting key structural works.
- o **Confirmed to the client the suitability of the selected self-tapping fixing screws** for securing the FIREPRO slabs to the concrete walls, through efficient direct telephone conversations with **ROCKWOLL** and **Ejot** and subsequent verification calculations.
- o **Recommended the risk assessment report for Countryside Properties**, Acton, with action plans reducing risks.

BWB Consulting

July 19

Intern Civil Engineer | Transport and Infrastructure Design (Civils Team)

- o **Developed design and completed technical CAD drawings (Feasibility Study)** for surface water drainage, finished levels, earthworks, service yard joints layouts, and external construction details for plot 4020B in **DP World London Gateway**.
 - o **Optimised the performance and effectiveness of the drainage system** using advanced modelling software, **MicroDrainage**.
 - o **Calculated cut-and-fill earthworks using Civil3D surface models**
- o **Completed access road vertical and horizontal alignment and vehicle tracking** for **Panattoni Park** in Theale using **Civil3D**.
- o **Analysed and simulated the basic traffic flow** at the Junction between Lower Parliament St and A612 in Nottingham using **Vissim** and **Linsig3**, identifying key flow patterns and suggested ways of marginal improvements.
- o **Reviewed structural design reports and drawings** of **Transport for NSW Parramatta Light Railway** in Greater Western Sydney.
- o **Recommended the site inspection report for plot 1080 in DP World London Gateway**, noting the progress and suggested solutions to existing issues to the site manager.

Tutorfair, Tutorful and Imperial MA*ths Outreach Programme

September 18 to Present

Tutor | Year 10 to 13 | Maths, Sciences and Humanities

- o **Have more than 5 years and 200 hours of experience** in one-to-one tutoring lessons and group mentoring sessions.
- o **Specialised in teaching A-level Maths**, Further Maths, Physics and Chemistry and GCSE Maths, Sciences, Economics and Geography, with lessons tailored to the needs of the students and requirements of the exam board.
- o **Underlined test-taking strategies** for the new and more challenging specifications, including setting extension questions.
- o **Challenged students to problem-based discussions** which help students efficiently consolidate and learn new concepts.
- o **1 of the 9 selected mentors** for the mA*ths programme, aiming to provide students the skills needed to gain an A* in Maths.
- o **Offered tailored online support** with students on the programme along with face to face masterclasses and study days.

COURSEWORK PROJECTS

Astana City Planning Group Project

Dec 19

- Collaborated to produce a masterplan that outlines a 50-year development strategy and identifies a series of ambitious but deliverable projects that will support unprecedented economic growth and secure more benefits and opportunities for everyone.
- Designed an all-in-one smart system, including demand-responsive transport network, innovative waste management, drainage network, energy systems and water resources.
- Adopted an adaptive modular concept which is illustrated in scaled masterplan in CAD, showing 4 areas of development.

Subgroup Leader of Surveying and Road Planning Project in Freshwater West

May 19

- Used specialised equipment to develop topographical survey, including traversing, levelling, detail mapping, and setting out.
- Awarded A* (Individual Mark: 93%) for 'outstanding achievement and presentation beyond the expectation of the supervisor'.
- Presented exceptional individual work including hand-drawn scaled contour map, road planning, environmental appraisal and obtaining optimum earthworks through iterative calculations.
- Commended for outstanding team management and team-building strategies which delivered tasks meeting strict deadlines.

Team Leader of BuroHappold Battersea Redevelopment Project

January 19

- Collaborated to produce a sustainable transport scheme suggesting self-driving passenger pods bridging adjacent communities such as Pimlico, new green transport hub improving connectivity within 2-mile radius and rerouting Crossrail 2 to Battersea linking with central London and beyond.
- Discussed innovative designs and technologies with my team including exquisite roof design to incorporate rainwater collection, installing piezoelectric flooring across the bridge deck and implementing green buses with wireless charging bus stands.
- Demonstrated efficient division of functions within the plot using scale models and sketches, achieving optimum balance of residential, office, entertainment and open space, prioritising the benefits of the local and surrounding communities.

EXTRACURRICULAR

Chair of Imperial College Rail and Transport Society

August 19 to Present

- Refreshed the society branding through a new Instagram @railandtransport and modern HTML website.
- Boosted membership numbers by 37.5% and reached the highest level of paid membership since 2008.
- Secured funding of £450 from external parties through a convincing presentation of the society and strong application.
- Manage the committee, budget and finances regarding events marketing and trips organisation.
- Initiated new networking events between multiple university societies to connect like-minded people from around the country.
- Liaise with professionals in the industry for presentations and events aiming to connect undergraduates with the industry.

Head Prefect (Marketing) at Concord College

September 17 to June 18

- Created a new Instagram @humansofconcord with photos edited using Adobe Ps and Lr to improve college outlook.
- Led and organised college tours with hundreds of prospective students and parents.
- Improved college magazine student blog posts to encourage contribution from the student body.

Founder of Concord College Business and Finance Society

January 17 to June 18

- Initiated debates on global issues and organised presentations on the finance and stock markets.
- Inspired 60 peers with a TED-style presentation on 'Why bridges don't fall down' from unique perspectives.

VOLUNTEERING

Founder and Treasurer of Comoros Project

Jan 20 to Present

- Founded this charitable project at Imperial College, aiming to fundraise, design and construct a community school in Comoros.
- Manage finances of the project including estimating costs and expenses and providing budgets for grant applications.
- Delegate the committee regarding sponsorship, fundraising events and international liaison with the NGOs.

Volunteer for the maintenance of Ffestiniog Railway

Dec 19

- Pulled in the new main power supply and earth cables to the new carriage shed, with the efforts of 10 other volunteers.
- Laid pairs of reused steel railway tracks in the shed, according to the architect's drawings.

Volunteer Teaching at London Nautical School

October 18 to March 19

- Volunteered once a week as teaching assistants for Pimlico Connection, which operates for the benefit of state schools.
- Adopted fun and active learning strategies to explore pupil's academic capabilities.

Lead Fundraiser for Ebo Town Community Project, Gambia

September 17 to April 18

- Raised £3000 single-handedly through second-hand book sales which gave 105 children more than a year worth of education.
- Introduced e-payments and a new price scheme that accounts for the books' conditions and relevance to the target customers.