

University of Hertfordshire **UH**

Spectra

Your impact





In September 2024, six years on from the first groundwork preparations for a new building, Spectra was opened to our students in the School of Physics, Engineering and Computer Science (SPECS).

Whilst the final equipment installations are still taking place, it has become clear in just a few months that Spectra will utterly transform the teaching and research in the School.

As one of the supporters of our new building, we want to extend a sincere thank you for your part in creating Spectra. Through your support we have built a state-of-the-art building designed and developed specifically to inspire innovation and collaboration.

About Spectra

An incredible, cutting-edge facility, Spectra is not only transforming the learning, teaching and research experience within the fields of science, technology, engineering and mathematics (STEM) for our students and staff, but also providing the resources needed for our academics to progress ground-breaking research.

It will advance the University's capacity to partner with regional, national and global businesses, particularly within aerospace, engineering, bioscience and other STEM areas, to support their needs, and together develop and innovate economically viable research and products.

The building has been designed to ensure all research and teaching areas are visible throughout, to encourage wider collaboration by ensuring students and researchers are always aware of what each other are doing. Communal workshops on each floor are further allowing staff and students from different subjects to collaborate more efficiently together.

Kitted out with some of the highest spec equipment available, new facilities include:

- two dedicated physics laboratories
- two isolated cyber systems rooms that allow cyber security students to test themselves against cyber-attack
- a £2m suite of wind tunnels; a strong floor to help test material strength
- new robotics labs and a robot football pitch for developing and testing autonomous robot behaviour
- flight simulators that can land in any airport across the world
- a welding bay and controls testing suite, plus two Caterham lightweight sports cars and a Tesla for use in autonomous vehicle design.



Remembering our heritage

The SPECS team has worked tirelessly to extract the current School from the main building – a space we occupied for over 70 years – and to ensure we don't lose our heritage.

The new building includes tributes to our history and our origins, whether this is the brickwork cladding to reflect the original Hatfield college, the corrugated effect that mimics the aircraft hangers of the de Havilland Aircraft company or the window layout that represents old computer punch cards, hinting at our origins as one of the first institutions to offer a degree in computer science.



Spectra is the largest single structure on campus, at 15,000m²

2,021 tonnes of steel were used in the building, equivalent to the weight of 126 double-decker Uno buses

It has generated £30m through the local economy (from local suppliers of materials to local labour required to get the structure built)

Looking to the future

Within Spectra, doctoral students work side by side with researchers as they delve deep into their subject before they make their mark on the world.

In the laboratories, students have the opportunity to put cutting edge theory into practice, while across the Connect spaces they can study and socialise with one another, developing lifelong friendships along the way.

With Spectra we have a catalyst for all our students, academics, researchers, technical and professional staff, to build a community that supports one another and ensures that we continue to move onwards and upwards. It will put the University of Hertfordshire, and SPECS, firmly on the map.

Through the quality of the environment afforded by Spectra we can continue innovating, focusing on excellence, and empowering our students with the knowledge and skills that employers need now, and in the future.

Spectra Scholarships

The first students in the new building will also benefit from the provision of six new Spectra Scholarships created by donors. These scholarships will support students from backgrounds under-represented within the School currently, including female students, black students and refugee students, and will be awarded by the end of the year.

Thank you to our Spectra Scholarship donors:

- Sir Brian May
- Jo Connell OBE DL
- Sir Gerard Newman Scholarship Fund
- The Paul Lidgett Memorial Fund



Our donors' impact

The majority of donations to Spectra were used for equipment, including a vertical lift module in our CDIO space which means students can access all the equipment they need at the touch of a button.

Our Wolfson Centre for Biodetection and Instrumentation Research, housed on the fourth floor, will significantly advance our capabilities in biodetection, already a particular research strength at Herts.

We are also especially grateful to the Garfield Weston Foundation who made a very generous donation to capital costs.

All our donors, as well as being listed on the Donor Wall in Spectra, are listed on our [website](#).





Herts. Beats Faster.



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