

School of Mathematical Sciences Building, Queen Mary University London

# Mathematical precision at QMUL

**£12m**

/ Project value

**January 2018**

/ The project commenced

**August 2019**

/ The project was completed

With mathematical precision, we completed the extensive upgrade of Queen Mary University of London's (QMUL) School of Mathematical Sciences Building. Located at QMUL's Mile End Campus, the £12m refurbishment and extension project has provided 3,652m<sup>2</sup> of academic accommodation, optimised existing space and improved the relationship between buildings in the campus realm. We also built a vibrant new communal area that allows students to socialise and congregate for special events. Aptly, given QMUL's reputation as a world-leading research-focused institute, the building is adorned with a never-ending mathematical equation across 14 floors of its cladding.

## The brief

QMUL's key objective was to enhance the learning environment by "optimising existing space" and creating "a stronger link between the buildings on campus". Among the primary considerations for the project were internal reconfiguration (71 academic offices and 72 PhD desks), the provision of new study, tutorial and social spaces, the upgrade of the envelope, and the modernisation of building services.



"We are already very impressed with the finish and quality of work that has been delivered."

Professor Boris Khoruzhenko  
Head of QMUL's School of  
Mathematical Sciences

“We knew that this would be a challenging project given the extent to which we wanted to upgrade and modernise our facilities. We collaborated with GRAHAM from the outset to maintain operations on campus over the course of the programme.”

Richard Halsall  
QMUL Assistant Director of Estates and Facilities

### The challenges

With research laboratories actively in use throughout the adjacent buildings, the minimisation of any potential disruption to sensitive QMUL projects was a priority. With this in mind, we installed movement monitoring equipment to audit our construction work and to ensure that it was not subjecting the neighbouring buildings to excessive vibration. Our on-site management team consistently analysed and verified the data, leading to no complaints from students, research or academic staff.

### The solution

Our transformation of the School of Mathematical Sciences Building has created the space needed for the School “to thrive as a top mathematics department”. Beginning in January 2018, our programme started with the excavation and groundworks to form a basement level extension to the north elevation that made way for the new social space area. Subsequently, we removed all of the retained building’s windows, before making structural alterations and improvements to prior works that had been carried out since the original building’s original completion. This involved a full height extension to the central core of the building. In addition, we delivered a full interior fit-out, which included the installation of new M&E plant. Demonstrating our innovative approach, our hoist and scaffolding solution was designed and built up at first floor level. This meant we could carry out the groundwork and formation of the rear extension prior to the initial programme – leading to a reduction in back end work and the de-risk of the overall programme.

### Outputs & Benefits

- / **Sustainable approach:** Targetting a BREEAM Excellent rating, we purposefully selected high-quality, sustainable construction materials that were used to upgrade the building’s envelope and improve its thermal performance
- / **Client satisfaction:** Our Project Manager, David Brisco, was praised as “key to the successful delivery of the challenging project” by consultants Gardiner & Theobald LLP
- / **Sense of arrival:** We constructed a new wide entrance staircase, with an accessible ramp into the building, a sunken courtyard with permeable paving and planters offering green space at the basement level
- / **Facilities:** The project has created 71 academic offices, a school office, 72 PhD desks, private and group study areas, a dedicated room for research seminars, a state-of-the-art lecture theatre, and an I.T. laboratory



For more information on how we’re delivering lasting impact:

+44 (0) 28 9268 9500    info@graham.co.uk    graham.co.uk

