

Laboratory case study

Solihull College West Midlands

Contractor | Innova Design solutions
Timescale | 6 weeks on site
Architect | Innova Design Solutions



Solihull College works in partnership with local employers including the NHS to link education with workplace training. With bold new plans to train the next generation of life scientists, the college were looking to align their facilities with their aims by creating two brand new labs that work for all science disciplines.



Brief

Solihull College trains students for the workplace by working closely with a network of local organisations including Greater Birmingham and Solihull LEP, Heart of England NHS Foundation Trust and the University Hospitals Birmingham NHS Foundation Trust.

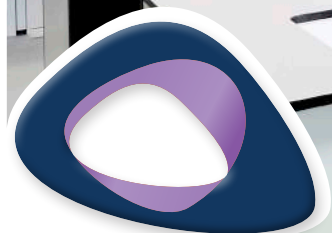
With the need for very unique and specific lab facilities, the college's existing open-plan science lab no longer met the needs of modern teaching and workplace learning methods and was designed entirely around the A-level curriculum 20 years ago.

Present aims required high-tech learning spaces that blur the lines between education and industry – and following a competitive tender process, Innova were selected to design and manufacture laboratories that pushed the boundaries as well as managing all aspects from rip-out to the installation of flooring, lighting, electrics, gas and plumbing.

In a job spanning six weeks over the summer, two labs, a store room and a prep room were created from the existing space.

“ We are thrilled with the results and look forward to training the next generation of scientists in these brilliant new labs. ”

Andrew Schneider, Head of the School for Science



Carcase		Manufactured from 18mm MF MDF	Seating		Ergonomic stools
Worktops		Trespa Toplab Base	Handles		Zinc alloy D handles
Edging		ABS Colour matched edging	Hinge		240 ° pivot safety hinges



“ Every potential problem from storage to technology and safety has been mitigated through design while practicals are now more engaging and rewarding. ”

Joe Burchell, 17, BTEC Extended Diploma in Applied Science



Solution

The resulting two labs feature a configuration that enables students to conduct practical experiments in pairs. Work stations span out from benching that runs around the perimeter of the room, with sinks and gas taps seamlessly incorporated into the units. Electric outlets are located on the front face of each bench, away from the work surface, whilst still easily accessible.

As a pioneering new facility, another objective was to make the facilities look and feel cutting edge. Technology was critical and it has been incorporated in the form of credit card-sized Raspberry Pi computers that plug in via USB.

To align the facilities with workplace needs, balance tables were an essential specification. Manufactured and installed with precision, the balance tables were attached to the structure of the building to mitigate factors such as small vibrations that effect readings.

Thanks to the two new labs, science facilities at Solihull College are unlike any you would find at a school or college. Not only are they clean uncluttered and built around the college needs, they push the boundaries of science teaching and workplace training.