The Energy Practice

BUILDING SERVICES • CARBON ANALYSIS • ENERGY CONSULTANTS

Huntingdonshire Regional College, Huntingdon

Project Location:
Huntingdon

Project Type:
Refurbishment

Client:
Huntingdonshire Regional College

End User:
Huntingdonshire Regional College

Overall Project Value:
£3 million

M&E Project Value:
£1.5 million

Project Duration:
18 months

Services:
Mechanical Engineering
Electrical Engineering

The Brief:
We were asked to carry out the mechanical and electrical upgrading works for the refurbishment of a two-storey business block. The existing building required a refurbishment as rooms were insufficiently illuminated and poorly heated, resulting in the learning environment for the students at the college being below current standards.

The Scope:
Mechanical work included a new central boiler plant, piped distribution services and the design of complete space and water systems alongside passive/mechanical ventilation. The electrical design (reviewing the campus' electrical loads) covered a new fire alarm system, co-ordination of new lighting installations with new suspended ceilings, rewiring data cabling and distribution board replacement.

Our Building Services Consultants liaised closely with the design team to co-ordinate the works and incorporate energy saving features. A thermal model (which ran heating and cooling simulations) and a load analysis of the building helped to determine plant sizing and ensured a good quality teaching environment was created.

The Result:
The completion of the mechanical and electrical works introduced a modern working environment for the students at Huntingdonshire Regional College. New LED lighting technology provided a sufficiently illuminated atmosphere for the students to learn in, whilst the new heating plant provided a comfortable working environment.

The combination of a new low energy LED lighting scheme and new efficient boiler plant resulted in significantly reducing the school's energy consumption. This led to cost savings and a reduction in carbon emissions. The lighting scheme included energy efficient controls such as automatic daylight dimming and presence/absence detection. Manual dimming was provided within the teaching spaces to allow the teachers to create their ideal teaching environment.