

Proposed alterations and improvements to:
The Engineering Department
Summer 2015



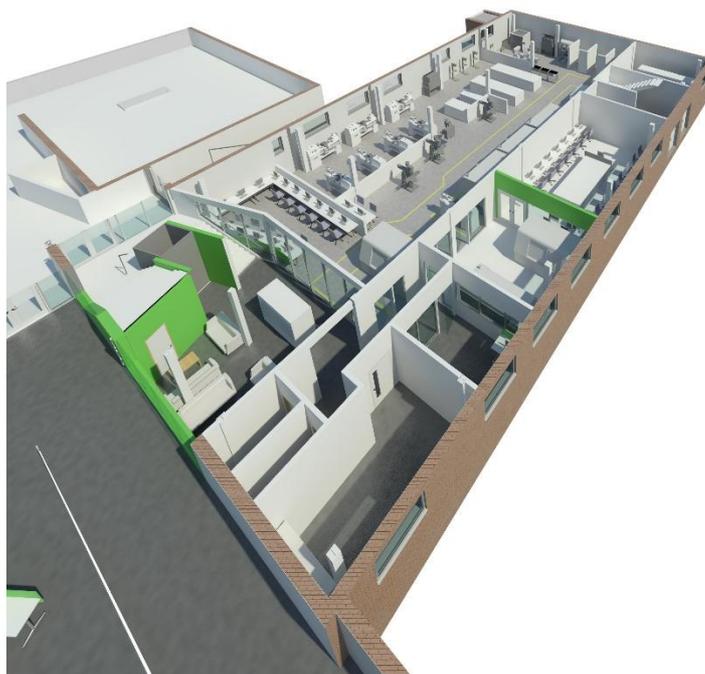
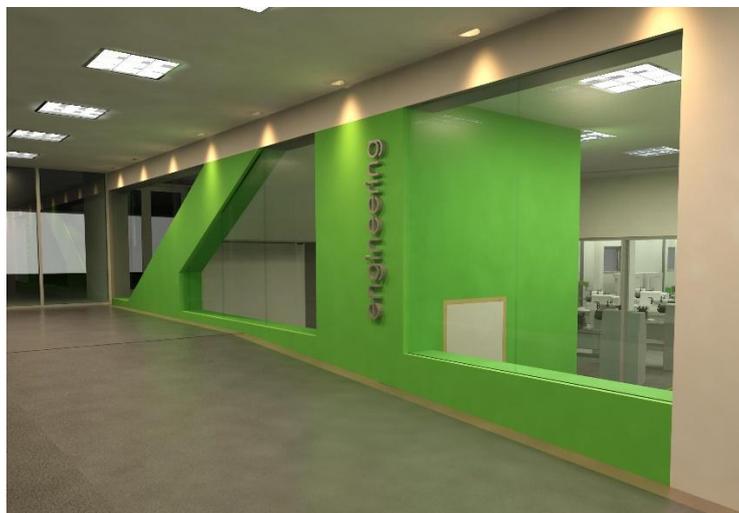
The project

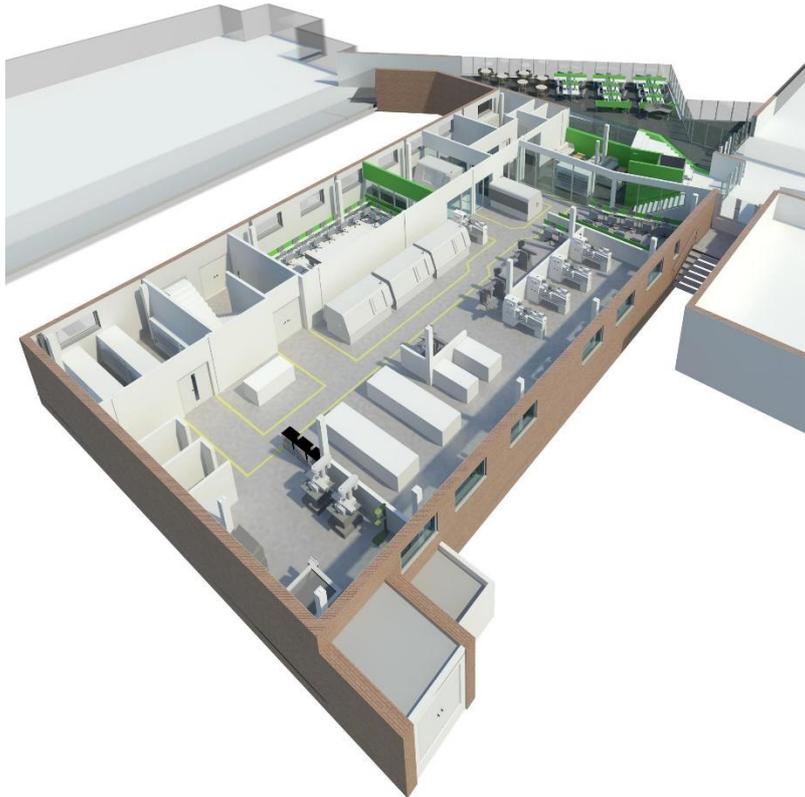
A full refurbishment and enhancement of the existing Engineering department for Nelson and Colne College. The project involves the creation of a new entrance and lobby area opening out to the main central corridor and triangle area with views into the main engineering workshops.

The existing workshops will be enlarged to accommodate a range of new state of the art engineering machinery and will include a new advanced engineering and innovation lab.

At first floor a series of new engineering IT labs will be created, staff rooms, WC's and a small open learning zone.

The existing MIS, Finance, Exams and HR offices will be fully refurbished and the existing polycarbonate external cladding is to be replaced with a new fully insulated rendered wall.





BREEAM Targets

BREEAM sets the standard for best practice in sustainable building design, construction and operation and has become one of the most comprehensive and widely recognised measures of a building's environmental performance. It encourages designers, clients and others to think about low carbon and low impact design, minimising the energy demands created by a building before considering energy efficiency and low carbon technologies.

A BREEAM assessment uses recognised measures of performance, which are set against established benchmarks, to evaluate a building's specification, design, construction and use. The measures used represent a broad range of categories and criteria from energy to ecology. They include aspects related to energy and water use, the internal environment (health and well-being), pollution, transport, materials, waste, ecology and management processes

BREEAM ratings are as below:

- Pass
- Good
- Very good
- Excellent
- Outstanding

As an existing building the credits available are restricted. This proposal is therefore targeting a 'Very Good' rating.

Building information

Build/project cost	£615/sqm
Building services costs	£235/sqm
External works costs	£Nil
Gross floor area	1200 sq/m
Total area of site	650 sq/m
General accommodation	
IT labs	178 sq/m
Advanced engineering lab	55.5 sq/m
Innovation lab	31.3 sq/m
Staff rooms	42.6 sq/m
Engineering workshops	345 sq/m
Stores	130 sq/m
Lobby	42.5 sq/m
WC/Changing facilities	28.8 sq/m
Offices	181 sq/m

Circulation 64.7 sq/m

Energy

Predicted Electricity consumption kWh/m²

110 kWh/m²

Predicted fossil fuel consumption - kWh/m²

10 kWh/m²

Predicted renewable energy generation - kWh/m²

Zero kWh/m²

Predicted water use - m³/person/year

0.67 m³/person/year

% predicted water use to be provided by rainwater or greywater

Nil

Steps taken during the construction process to reduce environmental impacts

Nelson Joinery and building have been appointed to carry out the refurbishment works and they are committed to:

- Compliance with all environmental legislation, regulations and codes of practice relevant to the construction industry sector
- Preventing pollution
- Continue to research and apply improvements to our environmental performance

It is the policy of Nelson Joinery & Building Limited to:

- Use recycled construction materials and sustainably sourced materials whenever these can be commercially justified
- Work with suppliers who recognise and actively reduce the environmental impact of their products
- Conserve energy and water, minimise waste and recycling where possible
- Keep transportation to a minimum and regularly service company vehicles to maintain their efficiency
- Inform employees of the company's environmental objectives and how they may assist in achieving them
- Meet our duty of care requirements in relation to waste by ensuring safe keeping, transportation and subsequent recovery or disposal of such waste.