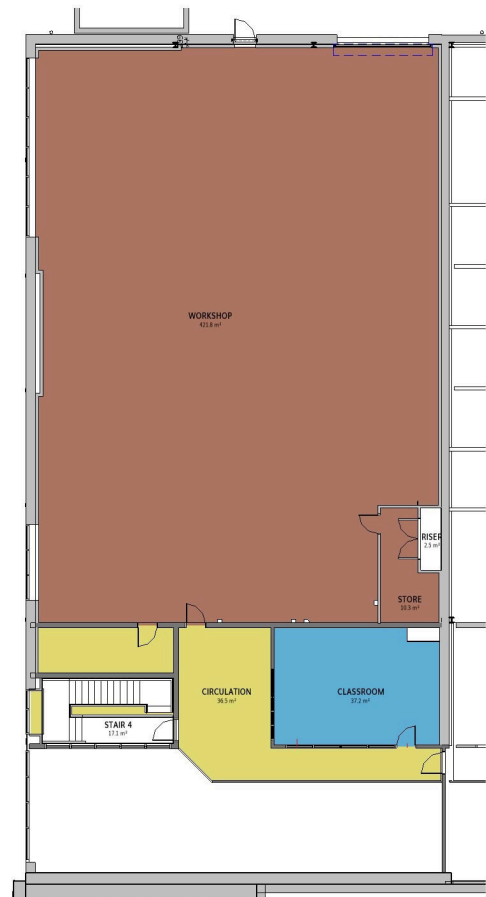




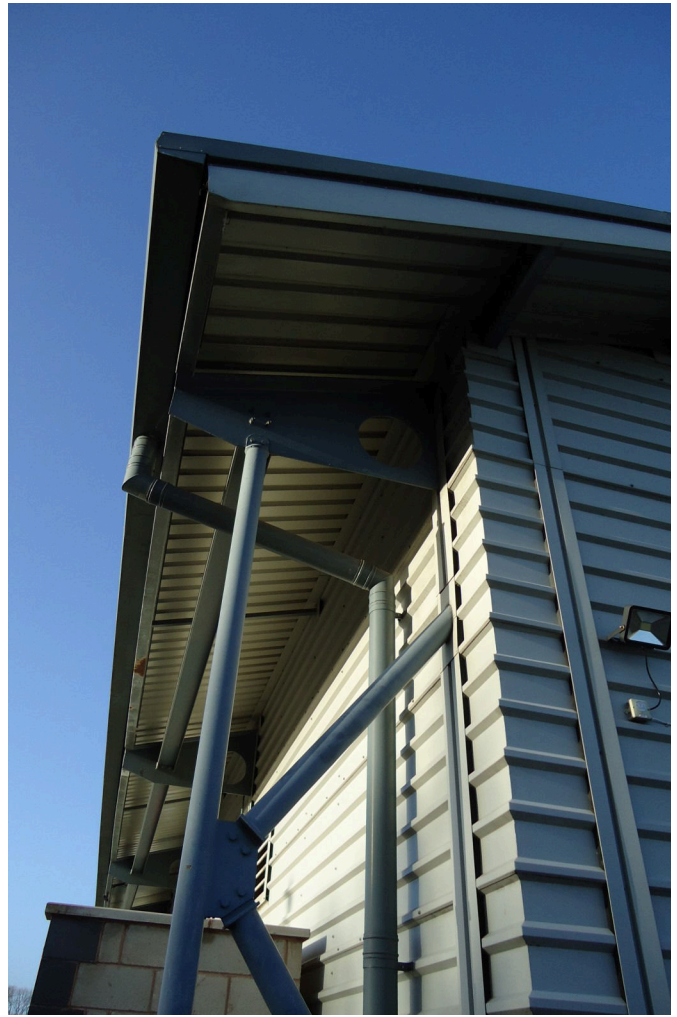
CASE STUDY: EDUCATION
ENGINEERING BUILDING EXTENSION



Lower Ground Floor



Upper Ground Floor



Design approach

Key design principles that will inform the Centre of Engineering Excellence:

- A new multi-purpose entrance will create a 'showcase' space for exhibiting students' work, while allowing pupils some valuable chill out space during break and lunch times.
- Design will provide additional daylighting to the new gable workshop and teaching facilities, incorporating more benching and demonstration areas. Further seminar and study space will enhance the existing curriculum and increase learning opportunities.
- An extra disabled w.c. will improve the current toilet arrangement for students, while an enclosed fire escape staircase will increase safety standards and link the two main floors in a cohesive manner.
- New entrance power-assisted doors and other improvements to level access, will better accommodate those with visual and hearing impediments and limited mobility.

Layout and Landscape

As a harmonious extension of existing facilities, the new building provides no threat to the local environment. The development of a graded bank will not directly affect any trees or roosts. Rather, additional shrub planting along the bank will stimulate biodiversity and encourage bird nesting.

The existing root protection areas of retained trees are guarded and the site will gain more visual appeal, with parking and landscape improvements enhancing the overall feel to the soft landscaping scheme.

External landscape opportunities will continue as the site progresses, with more opportunity for planting along the bank area providing a softer edge to the new extension while retaining the fenced student recreational area.

CASE STUDY: EDUCATION

ENGINEERING BUILDING EXTENSION

Name of Building

Centre of Engineering Excellence

Date

Planning Permission obtained April 2018

Project Cost

£1.5m

Building Type

Education - Post 16

Location

Kelsterton Road, Connah's Quay

Client

Coleg Cambria

Contractor

Wynne Construction



Building Overview

Planning permission has been granted for an 800m² extension design to Coleg Cambria's existing 'Centre of Engineering Excellence' building on their Deeside campus. The building, originally opened in 2002, is integral to Coleg Cambria's offering as one of the largest colleges in Wales and the UK.

The Engineering building is located towards the south west of the campus and lies within the settlement boundary of Connah's Quay. The centre extension will provide improved facilities for engineering students, including upgraded entrance, a new workshop for airbus apprentices and new teacher training spaces.

Open space to the east of the building will allow for extension alongside the original split level build, in keeping with the 3 metre level change across the site. Proposed design will reconfigure two current courtyard parking areas and enclosed five-a-side pitch.

By following earlier curved roof design, the extension will mirror existing build and aims to increase connectivity, improving wayfinding paths to other college departments and increasing accessibility routes for disabled access.

Environmentally responsible methods of construction and materials will be used to provide an efficient, sustainable building. With an aim to achieve a Green Guide for Specification A+ and A ratings where possible, sustainability strategies will include dual flush toilets, low flow sanitary fittings and boiler plant, mechanical and electrical facility modifications and upgrades.