

## The German visit in 2017 & two design-and-build projects



German group at Bremore Castle and manufacturing of framing of first oak panel

### Details

When: September 17 to May 18

What: As happened in 2016 eleven carpenter-Joiner apprentices and three managers from ZI Holzbau arrived in late September for two weeks. They came to improve their English and BIM skills, visit building sites, attend lectures and collaborate with DSA students. Project A involved half the Germans working with DT169/2 students to design and build oak panelling for the Gallery of the reconstructed Bremore Castle. The other half worked on Project B alongside DT175/2 students to design and build cutaway models of a timber frame NZEB building. While Project B concluded during the visit, Project A continues when time allows.

Where: Bremore Castle in Balbriggan, North County Dublin.

Who (within DIT): The students of DT69 Timber Product Technology, Year 2 with lecturer Alan O'Donnell; The students of DT175 Architectural Technology, Year 2 with lecturers Noel Brady and Tony Hayes; and Joseph Little (AHOs).

Who (without DIT): The ZI-Holzbau team from Biberach, Germany and Kevin Halpenny and his team from Fingal Co. Co. Parks Dept.

Sponsors (Group A): Fingal County Council Parks Department supplied all building materials and paid for the students transport to and from the Castle.

Sponsors (Group B): Brooks (who supplied timber and sundries), Ecological Building Systems (who supplied membranes and insulants), and Masonry Fixings (who supplied long screw fixings, bolts and sundries).

## Description

Project A: DSA lecturer Alan O'Donnell (a local of Balbriggan) was the link between the Fingal Parks Department and DSA. The Castle, which was a 1.5 storey ruin in 1986, is now in the last stages of a two-decade rebuilding project. The ambition of the project was to create oak panelling similar to the 16<sup>th</sup> century Oak Room in nearby Malahide Castle. The involvement of DSA and Germany visitors this year will be the first of several phases resulting in a magnificent fitout of the Castle's Gallery. This will include CNC carved panels to be inset within the panelling. While the Germans (who had more site carpentry experience) were present the combined student group setout the works, clarified details and manufactured the oak framing of one wall (including alcoves). After the Germans left the DT169/2 students have continued working to complete the installation of the panelling of one wall as time allows by the end of this academic year. The German students gained insights into Irish craft skills and Irish history, the Irish students gained confidence and new site skills. Lecturer O'Donnell was delighted with the learning. Kevin Halpenny is hopeful DSA come back with or without the Germans in future years.

Project B: 2019 and 2021 are different dates for the staged national introduction of the onerous Nearly Zero Energy Building (NZEB) Standard. Lecturer Noel Brady created the brief for the NZEB detailing and model making project. All DT175/2 students made details of compliant energy, timber frame construction. Three of these were then brought together as the basis for a full-scale cutaway model (to be made with the Germans) while the rest of the students made scale models. It was interesting to see heated discussions about the relative merits of Irish and German construction methods, structures and material availability. The final full-scale model communicates a wide range of technologies and strategies that are valuable for DSA students to see.

The Germans visited the Sisks Joinery Training Centre and the Sisks Capital Docks construction project in the Dublin Docks. That connection may bear fruit in subsequent years. An evening event at the end of the second week attracted about 120 members of DSA to listen to the German apprentices describe German construction, learn about the two projects and share German beer and pretzels! Students and lecturers alike enthused about the potential of timber in DSA afterwards. The next day Alan O'Donnell, Joseph Little, Kevin Halpenny and the German team welcomed DIT President Brian Norton to view the Castle and Gallery.



President Norton with German group and (L-R) Alan O'Donnell, Kevin Halpenny and Joseph Little



(Clockwise from top left) NZEB timber frame cutaway model, German apprentices presenting, construction works in Bremore Castle, The evening event.