

Individual sensors make control more accurate

- Electric room heating
- · Retrofit to buildings built between 1990 and 2009
- · Installed, commissioned and warrantied by Prefect

Bangor University is committed to being known globally as The Sustainable University, and is in the top 30 of the world's greenest universities according to the Universitas Indonesia UI Green Metric.

Ffriddoedd Village is their largest accommodation site with around 2,000 rooms. The installation of the Irus central control heating system adds to this commitment with close to 2500 controllers for rooms, kitchens, corridors and communal areas.

Lee Williams is the Halls Operations Manager and since 2009 has been responsible for ensuring the smooth running of accommodation services.

As manager of the Irus system, he explains "Irus has been installed in a mix of buildings built between 1990 and 2009. Previously the temperature was limited to 21°C by sensors in the stairwells. If the external temperature was any warmer than 19 degrees the heaters wouldn't operate. We had issues because the stairwells and corridors have large windows, are less frequently used areas and are inherently colder. In the springtime, when the sun shone, the foyers became hot, but not necessarily because of the outside temperature. Conversely, in winter, with colder outside temperatures, the foyers were warmer than outside, subsequently the heaters wouldn't come on!"

He continues, "Within the bedrooms when residents complained their rooms were cold, we used a USB temperature logger for a



couple of days and analysed the results. Usually proving that their rooms were on average 19-21 $^{\circ}\text{C.}"$

"The Prefect Irus system is fantastic, it's advantageous to view everything that's going on in a room in terms of temperature, lighting and decibel levels. Now, if we have a complaint, we're able to see a live representation of that room on Irus - we have data to hand that shows instantly the temperatures and humidity over given periods without ever setting foot in the room!"

The Irus system connects each room-node to the central controller. Mains Borne Signalling transmits data back and forth. Irus is managed via an internet portal. Lee continues, "The system is very easy to use. As soon as you log in and click on the 'P' - all of the blocks come up. It's easy to navigate, intuitive and comprehensive. The Welfare team have access and find the decibel level monitoring useful if a complaint about antisocial noise is lodged. Likewise, if they are concerned for the welfare of someone who hasn't been seen for a few days, they can check lighting levels or boost requests in a specific room and if any of the levels have been adjusted this will confirm activity in that room."

