How We Manage your Heating

To ensure your comfort and to meet our environmental responsibilities to reduce energy consumption and thus CO_2 emissions the College continues to invest in and install intelligent building management systems (BMS) to its buildings.

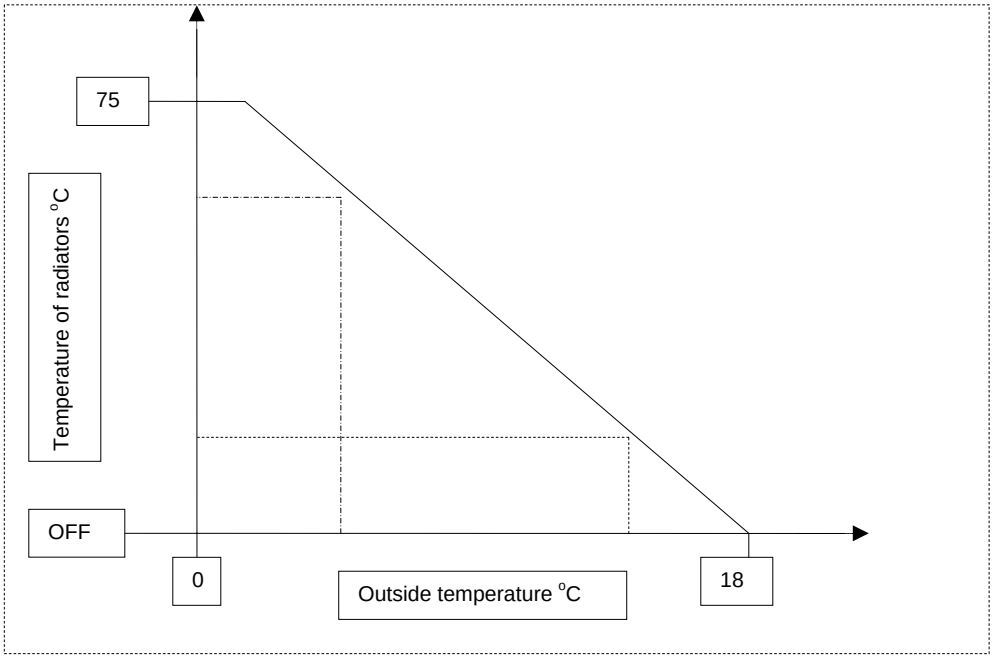
These BMS systems have at their heart a programmable mini computer which enables "intelligent" control of building plant and sub-systems such as heating and hot water.

The BMS is intelligent in that we are able to programme a set of control parameters for building operation such as the ideal room temperature, hot water temperature etc. the systems will then work to try to achieve these environmental conditions.

We set these against UK standards and accepted best practice for achieving the ideal comfort and operational conditions for the varying types of buildings on campus.

The majority of our heating systems are managed as Variable Temperature systems, this means the amount of heat put into the building and thus coming from your radiators varies in relation to the outside temperature.

This is set up as a simple straight line relationship illustrated by the diagram below:



The diagram shows simply that the warmer it is externally the "cooler" the radiator temperature will be and vice versa. At an outside temperature of 18°C the system will shut itself 'off'.

In typical circumstances with an outside temperature of 14°C the temperature of your radiator will be approximately 40°C. This is only 3°C above body temperature so it will be difficult to feel any warmth from the radiator at all, but it does not mean the system is not working.

At a lower outside temperature say 0°C the temperature of your radiator will be set at approximately 75°C. This is twice your body temperature and therefore will be hot to the touch.

In the majority of our buildings we aim to maintain an internal space temperature of 21°C (72 °F) throughout.

Intelligent building management systems allow us to better maintain comfort conditions for the occupants based on both internal and external influences whilst also only consuming the energy to meet that demand and avoid unnecessary wastage.

Estate Services, October 2005