engCETL: Technology for Teaching

Visualiser: a device that can be used with a data projector and screen as a replacement for the overhead projector to provide a 3-dimensional display of an object.

- Can be used to display solid objects to an entire class in full colour, with a high magnification lens offering extreme close-up views.
- Coupled with a computer, any of these images displayed can be instantly captured and annotated allowing electronic copies of an object to be produced.
- Can also display the printed word, no need to prepare slides or transparencies as visualisers can show documents, books, artwork and 3-dimensional objects.
- High magnification view, can be used to demonstrate close details, removing the need for a one-to-one basis for a demonstration or the need to wait for an object to be handed around a classroom.
- The technology can enable teaching staff to demonstrate once and then target individual students for personalised support in the time saved.

Personal Response System (PRS) is a voting system whereby each member of a class uses an individual handset to respond to questions set by the lecturer.

- The questions may be used to get students to interact with their lesson, keeping their attention and monitoring their understanding of the subject matter.
- The questions posed may also be used for assessment purposes.
- Using a voting system makes assessment more interactive and drastically reduces marking time.
- Voting systems can provide the lecturer with instant responses and provides instant data analysis producing graphical representations or spreadsheets.
- PRS provides instant feedback to students, which can be produced anonymously if needed.

Interactive Whiteboards: offer the same features as a traditional whiteboard but with the ability to save or print out the results without any additional effort.

- Will also allow the user to make notes and annotations over existing applications (such as PowerPoint slides or a web page) by directly writing onto the whiteboard.
- The handwriting recognition software means that handwriting can be changed into text
- Any notes can be saved in electronic format making them easy to distribute.
- The interactive whiteboard can be used as a touchscreen for the presentation PC, enabling all pc based applications to be controlled via the whiteboard with its accompanying electronic pen.
- They can allow integration of various media types into one lesson: videos, animations, presentations, notes, web pages etc
- They can also be used for interactive quiz development programmes like Hot Potatoes. A lecturer can create a “drag and drop” quiz in Hot Potatoes and students can interact directly with the whiteboard, via an interactive pad/slate or using a PRS voting system.

Interactive Pad/Slate: allow students to add their own comments to an interactive whiteboard session through the use of the lightweight hand-held graphics tablet (A6 size) with an attached electronic pen.

- The student is able to contribute to the lesson without having to stand at the front of the class and the lecturer is able to move around the classroom and control the board from anywhere in the room.
- This gives the lecturer more freedom to give individual attention to students.

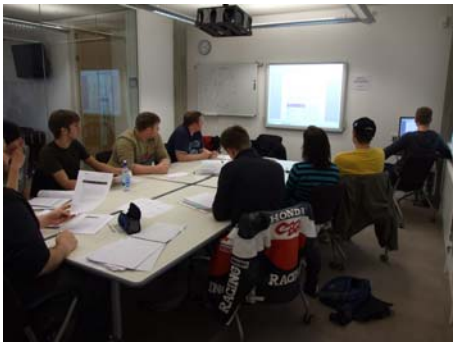
engCETL also has an overhead projector in the large Design Studio, as well as a portable OHP. Each room also comes equipped with a PC, monitor, a wireless mouse and a wireless keyboard.

engCETL: Upper floor of the Keith Green Building

One of the major achievements for our first operational year was the opening of our new learning and teaching space on the upper floor of the Keith Green Building, financed by a capital budget of £1.4M included in our CETL grant from HEFCE. We started by conducting a needs analysis that involved students, academics, industry and engCETL staff. Our architect was also briefed to design a space that mimics industry, and we are proud of the innovative learning and teaching space that we are now able to offer to the staff and students of our engCETL departments. The building was officially opened on 13 June 2006, and we are now conducting a large-scale evaluation of the engCETL learning space.

Design studio (shown above): With facilities including an **i**nduction loop, lectern mounted tablet PC, AV recording facilities, wireless keyboard and mouse, wireless data projector, flipchart and OHP, visualiser and wireless internet connection.

Booking times are 9 am – 5 pm, and the capacity is for 48 (depending on layout) people, with folding/stackable tables and chairs.



4 small design studios/breakout rooms (pictured above): All with the following facilities: a PC, interactive whiteboard and pads, wireless keyboard and mouse, wireless data projector, flipchart, wireless internet connection. One portable OHP is available for use in the breakout rooms. AV recording facilities are available in breakout room 4.

Booking times: 9 am – 5 pm, and the capacity is for 18 (depending on layout) people, with folding/stackable tables and chairs. Two breakout rooms are joined by a moveable dividing wall, and are available separately and together (which will accommodate up to 36 people).

Details on bookings are available on our website: http://www.engcetl.ac.uk/about/booking