Low Energy – Sustainability in Historic Buildings Syllabus:
The four Low Energy Strategy sessions will comprise a mixture of lectures, practical exercises, seminars, and case studies of green buildings to give a brief overview of sustainability in historic buildings now and in the past. You will gain:

- A general understanding of sustainable design and construction principles.
- An overview of the historic design features that enabled buildings to benefit from local climate.
- Understanding of current problems in historic buildings.
- Knowledge of how sustainability and energy efficiency measures can be sympathetically applied to historic buildings.

Assessment Components:
Students will be required to submit a report (max 3000 words) comparing two different approaches to sustainable refurbishment of historic buildings, based on case study buildings.

**Session 1:** Introduction to the course:
Introduction to sustainable design principles; Issues created by poor design in recent years; Current issues in historic buildings - rising running costs; problems with adapting to changing use pattern etc.; Case study: Corpus Christi College Accommodation building, Oxford

**Session 2:** Overview of historical design for climate:
Applying historical principles to current design; Sustainability trends and policy for new & existing buildings; Sympathetic adaptations to historic buildings – prioritizing measures on a case-by-case basis; Case studies; Residential extensions in West London

**Session 3:** Lecture by Keith Jones, The National Trust; Discussion of work done to National Trust properties in Wales resulting in a net energy use reduction of around 40%

**Session 4:** Site visit to Morden Hall in South London; A look at how technology can be used to improve energy efficiency in historic buildings

**RECOMMENDED READINGS**


Todd, S, The Retrofit Potential of Dwellings in the UK, The Research Centre for Urban Change, School of Environment and Life Sciences, University of Salford

Maekawa, S & Toledo, F (2001) Sustainable Climate Control For Historic Buildings In Hot and humid Regions


The National Trust - [http://www.nationaltrust.org.uk/what-we-do/big-issues/energy-and-climate-change/what-were-doing/](http://www.nationaltrust.org.uk/what-we-do/big-issues/energy-and-climate-change/what-were-doing/)
The Passivhaus Trust - [http://passivhaustrust.org/](http://passivhaustrust.org/)