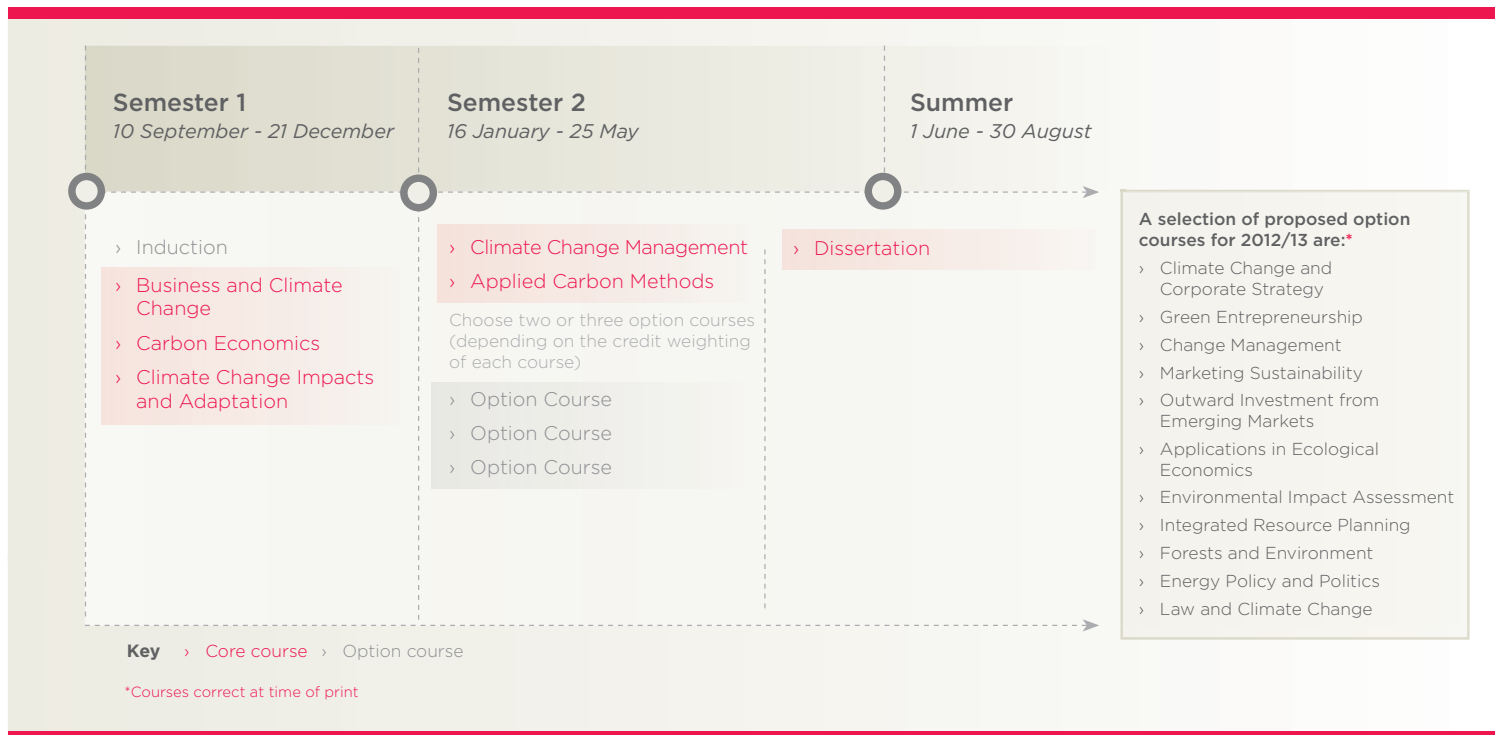


# MSc in Carbon Management

## Programme Structure



## Details of core courses

### Climate Change Impacts and Adaptation

This course first introduces the underlying science of human-induced and naturally-occurring climate change, using the IPCC's Fourth Assessment Report (2007) as its basis. It examines predictive models of climate change and its impacts. It goes on to examine past, current and projected impacts globally, regionally and, using the UK as a case-study, nationally and locally. It then explores the potential for adaptation at these different scales and the potential win-wins of coupling adaptation with mitigation. Finally it covers the legal implications of human induced climate change, the way climate change is communicated, and the issues of trans-boundary climate change impact assessment.

### Business and Climate Change

This course first introduces the concept corporate carbon footprints and their assessment. It goes on to cover the various management policies currently used by companies to reduce carbon emissions and the ethics of such mitigation. It examines the supply chain and the influence businesses have in effecting change in the carbon footprint of this chain. Finally it closely examines the investment basis for climate mitigation by business, the perceived barriers to this investment, and the legislative drivers for change.

### Carbon Economics

This course first introduces the concepts of carbon markets and the efficiencies (or lack of) therein. It then covers the models currently used to assess carbon performance and issues of scale in terms of time and geographical coverage. It explores the existing and proposed policy instruments for carbon management via fiscal measures and makes a critical assessment of cost-benefits analyses of these mechanisms.

Finally it makes an in-depth exploration of the emission trading scheme, its mechanisms, development and barriers.

### Climate Change Management

This course examines climate change mitigation at a range of scales from geo-engineering to microgeneration, often focussing on the UK/Scotland as a case study. It explores the role of science and technology in carbon management and the interactions of other drivers (e.g. land use and N deposition) with carbon management policy and ethics. It includes coverage of national targets and scenarios, local and household mitigation, and examines feasibility and implementation of carbon reduction projects such as wind energy, forestry and anaerobic digestion.

### Applied Carbon Methods

This course aims to turn out students who are able to approach dissertations with all the necessary research methods training to address most carbon management issues as well as enter any organisation and have the skills and knowledge on the key areas to research and evaluate carbon management and ultimately to make recommendations on improvement.

### Dissertation

The course allows candidates to design, plan and execute high-level research based on knowledge and skills acquired in taught course-delivered elements of the programme. It gives candidates a opportunity to undertake novel research under the supervision of at least one qualified academic member of staff. Additional academic staff and industry experts may be drawn upon as advisors to support the candidate.

the summer block on a topic related to marketing and business analysis. Various types of dissertation are acceptable. A dissertation may critically review theoretical work, analyse problem-specific data or evaluate new modelling approaches. Examples of the aims of the dissertation are: to give the student the opportunity to practise and gain confidence in the use of skills which s/he has acquired in the preceding courses; to provide an opportunity to study a particular topic in depth.