

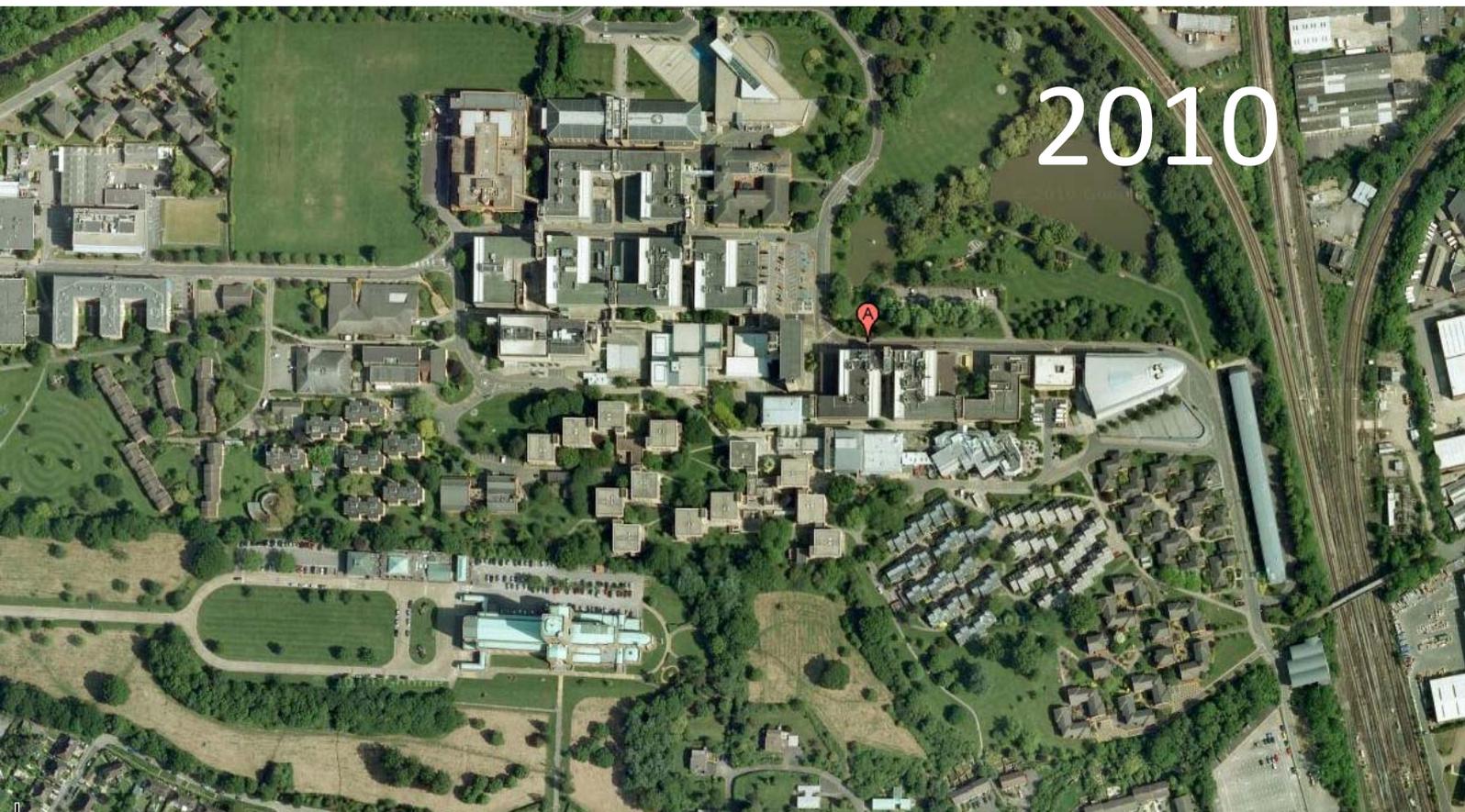
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University of Surrey Masters courses Market Review

Executive summary

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Masters Course Market Review: Executive summary

Overview

Purpose and conduct of the market review

The Centre for Environmental Strategy has commissioned this review of the market for its taught postgraduate courses:

- to inform its decisions about future provision, and
- to review the course offerings

with a view to raising the intake for these courses.

Because of constraints of time and funding, the review has for the most part been restricted to information collectable from the internet (see main report). This restriction is positive in that it reflects how a prospective student, or indeed potential industrial employer, may initially attempt to find out more about the CES masters courses and how they compare with competitor courses available in related topic areas elsewhere in the UK.

This report summarises the findings of the review, draws a series of conclusions from the information collected about the market for the taught postgraduate courses, and makes a series of recommendations about what the CES needs to do to promote its masters courses better. In particular, the CES sought answers to three specific questions relating to its masters courses:

- a) What competing courses are on offer in the UK?
- b) What are the Masters Courses' 'unique selling points'?
- c) Are there gaps in the market for postgraduate courses that Surrey could exploit?

Findings

Competitor courses

When its three masters courses – in Environment Strategy, Corporate Environmental Management, and Sustainable Development – were last subjected to periodic review in 2008, CES stated that the MSc in Environmental Strategy, for instance, was “unique and therefore subject to little competition in the Southeast”. No systematic attempt was made to identify the nature of this competition.

In this review a systematic approach has been adopted to identifying competing courses. Information has been assembled, from ‘comprehensive’ internet searches (see main report) about competing courses in one particular region of the UK – the East of England – chosen because it has similarities to Surrey’s region. The East of England has a similar relation to London (which is the main but highly differentiated source of competition for masters courses in the UK), it is reasonably self-contained like the South East, and it has similarly dispersed locations for its institutions of higher education (HEIs).

There are 235 HEIs in the UK from which potential students can choose courses to attend. Seven of these are in the East of England. Five of these offer courses that compete with those at CES (see main report, Table 1). If the East of England were representative of the UK as a whole, then it might be reasonable to expect somewhere in the region of 150+ universities and colleges offering masters course in direct or overlapping competition with CES at the national scale. Clearly not all of these would be equally attractive to UK students located in Southern England, especially those tied to places of work and so registered part-time. But this proviso is likely to be less relevant to overseas students, who have been the major growth area in taught postgraduate courses over the last 10 years, (see Part 1 of the Review on the SEES).

Taught postgraduate courses in the region – offering coverage of sustainability, energy and environment – were identified using Find A Masters.com. This website bills itself as “a one-stop shop for students looking for a postgraduate Masters course/qualification within the UK” and as offering a “comprehensive database of MSc, MAs, etc. in the UK and Europe”. This web site is the first result in a Google search for masters courses in the UK and can be assumed to be the starting place that novice, prospective candidates use to begin their own internet searching for courses. Using ‘sustainability’, ‘environment’ and ‘energy’ as undelimited key identifiers jointly selected 3,860 postgraduate courses in the UK as whole: 3217 on ‘environment’ courses, 429 on ‘energy’ and 414 on ‘sustainability’. As these totals reveal, it is evident that the CES masters courses now have to compete in a very crowded market place.

When restricted just to the East of England, internet searches identified 16 taught postgraduate courses with offers covering sustainability, energy and the environment. These courses all compete (directly or indirectly), or overlap (strongly or weakly), with the courses offered by CES (see main report, Table 2). Almost all use vocabulary in their course descriptions that maps on to the modules run by the CES on its own taught postgraduate courses.

This review has revealed that the CES Environmental Strategy masters course does not occupy a strongly differentiated market niche signalled by the possession of a clear and unique selling point. And, since the other two courses share core and elective modules with the Environmental Strategy MSc, it is unlikely that they do either. Instead, all three share points of similarity with almost all of the other taught postgraduate courses identified.

As gleaned solely from their on-line course descriptions, five courses – just in the East of England alone – stand out as having most in common with the CES masters courses. These courses are:

- Cambridge University’s MSc in Engineering for Sustainable Development,
- Cranfield University’s MSc in Environmental Management for Business,
- the University of East Anglia’s MSc in Environmental Sciences,
- the University of Hertfordshire’s MSc in Environmental Management, and
- the University of Hertfordshire’s MSc in Water and Environmental Management.

All of these courses appear, from their on-line course descriptions, to teach topics covered by at least 4 (of the 11) modules taught on the CES MSc in Environmental Strategy.

But this overlap is much more widely spread than just these five courses. As the review indicates, this can be seen in the widespread teaching of topic areas aligned with CES masters modules. This is most obvious in relation to teaching on aspects of Environmental (Auditing and) Management. Three quarters of the course descriptions make some reference to teaching in this area and more than half of them also appear to refer to Environmental Auditing and Management Systems as well (although they do not all use this particular vocabulary). This overlap is also evident in teaching around four other topic areas as well:

- environmental law,
- environmental science and society,
- sustainable development, and
- environmental economics.

More than a third of the other courses identified –in the East of England alone – are described as teaching these topic areas.

The CES MSc in Environmental Strategy does have characteristics that make it different. It is the only one of these taught postgraduate courses examined to signpost the possibility of some form of work placement, although other courses do draw attention to their close links to industry. But the CES masters courses are not alone in signalling themselves as having

accreditation routes to the Institute of Environmental Management and Assessment. The University of Hertfordshire's MSc in Environmental Management for Business shares this distinction. And other taught postgraduate courses, at Cranfield and Hertfordshire, also draw attention to their accreditation by the CIWEM, one of the Engineering Council's PEIs.

The CES masters courses also share characteristics with other taught postgraduate courses on offer closer to home, elsewhere in the Faculty of Engineering and Physics at the University of Surrey. As well as sharing modules with the MScs in Process and Environmental Systems Engineering and in Transport Planning and Practice, as described in the 2008 Period Review, there are also overlaps suggested by their course descriptions with the recently established MScs in Renewable Energy Systems Engineering and Water and Environmental Engineering.

All of these indicators point in the same direction. The CES masters courses are not unique. Instead they are seeking to operate in a very crowded market place and face stiff competition.

Professional institution requirements

Information has been assembled from the websites of professional institutions, including the Engineering Council, its Professional Engineering Institutions (PEIs: IMechE, ICE, IStructE, CIBSE, IBiol, CIWEM, IChemE, Energy Institute, IET) and the IEMA, seeking to record how their requirements for professional membership relate to the CES Masters courses. As the review indicates, identifying which masters courses in the UK help fulfil these requirements is far from easy.

As a result, there exists a clearly perceived need to explain to prospective candidates how they can acquire the status of Chartered Engineer as evidenced by the Get Chartered.org website. This offers, as its name suggests, advice on how to become a Chartered Engineer (see main report). The advice it gives is clearer than that offered by either the Engineering Council or its constituent PEIs. Between them, they do not employ a uniform approach to spelling out the relationship between taught postgraduate courses and entry into their forms of membership.

The Engineering Council refers to Professional Engineering MScs, meaning those recognised by its PEIs. It states that, while such MScs are gained through undertaking courses in HEIs, they are treated as part of a would-be chartered engineer's 'professional development' along with work-based experience. Most PEIs make explicit reference to candidates needing to have an MSc or masters level education to become Chartered Engineers.

The IMechE goes further, stating that to become chartered, candidates must have a Masters level education but that this can be achieved either by undertaking an accredited MSc programme or by further learning that demonstrates additional knowledge and understanding. In this sense, possessing an MSc may be the PEI's (and the Engineering Council's) preferred route to achieving the status of Chartered Engineer but it is not the only one. A work-based route is also possible.

Accredited (science-based) masters level courses have to meet the FLTM requirements (Further Learning to Masters Requirement). Further Learning is included in UK-SPEC (see previous SEES Review) as a way for whose initial academic qualifications do not meet in full the exemplifying requirements for Chartered Engineer (CEng) or Incorporated Engineer (IEng) to demonstrate the required knowledge and understanding.

Some PEIs such as CIBSE list specific MScs as suitable further learning to meet the academic requirements for CEng registration but those at Surrey University are not listed amongst these. Others such as the IET do list some at Surrey University but the CES masters courses are not amongst these. Other PEIs, such as the ICE and the Energy Institute, simply refer to accredited MScs as being those listed by the Engineering Council. The IEMA, which confers the title of Chartered Environmentalist, signals that MSc courses may be awarded units that can be used, along with work experience, to achieve this status.

The IEMA's (2010) Full and Chartered Environmentalist (MIEMA and CEnv) Membership Pack lists in detail the IEMA's membership criteria and the key competencies required for chartered membership. However, it does not identify any of the masters course whose units offer routes into becoming a Chartered Environmentalist (such as the CES masters courses).

In short, it is difficult for prospective students to evaluate, from the information provided on their websites by the relevant professional institutions, whether the CES taught postgraduate courses contribute to gaining the status of Chartered Engineer.

Employers' expectations

Telephone interviews were undertaken with nine employers focused on their expectations about future recruitment of people with masters qualifications in sustainable development/environmental technology. The employers interviewed were selected from those who have a known interest in this area because they have previously sponsored EngD students.

All of these employers (except one) are large firms (see main report), with either a major presence globally or specifically in UK. They each have large workforces including professionals providing services typically related to the construction and operation of the built environment or natural resources. All need to be able to recruit engineers skilled in energy, environment and sustainability issues.

At each employer, senior staff – typically Recruitment or Human Resources Managers - were asked three questions:

- a) Do you recruit people with Masters Degrees in sustainable development/environmental technology?
- b) What skills would you anticipate those finishing masters in environmental technology would have?
- c) How do you expect your requirements will change over the next five years? (Are you likely to employ more or less people with these skills?)

All nine employers reported that they do recruit people with masters in environmental technology. But they are divided about what will happen to their recruitment of them in future. Five employers expect to recruit more of them. Of the other four employers, one is equivocal, one says it depends what happens to the economy, another is uncertain (because of its sources of funding) and the last gave a very detailed answer, itemising their expected growth in recruitment of postgraduates in general and in sustainability in particular over the next 2 to 5 years, as related to the strength of economic recovery.

The nine major employers interviewed anticipate that postgraduates will have acquired a diverse and wide-ranging set of skills (see main report, Table 5). But they are divided about the types of skills they expect those emerging from taught masters course to have gained or developed. Between them, they identified three types of skills:

- personal skills,
- general skills, applicable in any sector, and
- discipline skills, those specific to the application of sustainable development and environmental technologies particularly to the natural and built environments.

One employer only expressed interest in students on taught postgraduate courses emerging with developed personal skills. Conversely, two other employers only expressed interest in postgraduates emerging with discipline skills. Two others made no mention of discipline skills, concentrating on general skills applicable to any sector.

These varied and divergent responses suggest that there is no single, simple set of skills that employers are looking for in those emerging from taught postgraduate courses. Instead there are three separate types of skills – personal, general and discipline based – that they

want those they recruit to display. Some employers emphasise one type, others another. Some specify a mixture of personal and general skills. Significantly, however, for the CES, those looking for the specific discipline skills – which are a major emphasis in what CES offers on its masters course – are in a minority. Just two of the nine employers interviewed here specified particular discipline skills as part of their recruitment requirements.

Conclusions and recommendations

The CES requested that the market review of its masters courses address a specific set of questions:

- a) What competing courses are on offer in the UK?
- b) What are the Masters Courses' 'unique selling points'?
- c) Are there gaps in the market for postgraduate courses that Surrey could exploit?

The conclusions drawn here from the review are offered against each of these specific questions set by the CES.

What competitor courses are on offer in the UK?

The CES taught postgraduate courses are far from unique or without significant competition. In the UK as a whole, there are over 3,000 masters courses with the words 'environment', 'sustainability' or 'energy' in their titles. In the East of England alone, there are 16 postgraduate courses whose course descriptions suggest that their offers at least overlap, if not compete directly, with the offers of the CES masters courses. If this region were representative of the UK as whole, then CES might expect to discover several hundred competitor postgraduate courses located in England, Wales, Scotland and Northern Island.

To stand out in this crowd for prospective students, the CES masters courses would need four critical success factors:

- a strongly differentiated market niche,
- signalled by clear and unique selling points,
- offered through a highly accessible web site, and
- containing competition-beating information.

This analysis suggests that CES needs to return to the web pages that it uses to support its three taught postgraduate courses, by providing information to prospective students, to ensure that they meet each of these critical success factors. Our experience of using these pages for this review, and comparing them with the web pages supporting other competitor courses, suggests that they do not.

What are the Masters Courses' 'unique selling points'?

The CES masters courses are not unique. In fact they face stiff competition. They do not, as the 2008 Period Review assumed, occupy a distinct market niche or have a unique selling point in relation to taught postgraduate courses in other HEIs in the UK. Instead the opposite is true. They need to be recognized as operating in market place packed with stalls selling similar wares. And here standing out from the crowd to attract the attention of novice, prospective students depends on the distinctiveness and clarity of the offer being made by these courses. As above, this emphasizes the need for the CES masters courses to have highly accessible web sites that contain competition-beating information.

But more is required than just upgrading the quality and presentation on show on the web pages for these three masters courses. CES also needs to revisit the offer for each of its three taught postgraduate courses in the light of the analysis of its competitor courses provided by this review. In particular, it needs to address what it is that could make its courses distinct. It seems unlikely that the key differentiators here will be the discipline-based topics that form the focus of its (core and elective) modules. It shares teaching in these topic areas with too many of its competitors. Instead its differentiation could lie in the skills set that it explicitly offers to those who enrol on these courses, see below.

Are there gaps in the market for postgraduate courses that Surrey could exploit?

Since the 'environment', 'energy' and 'sustainability' market places for postgraduate course are so crowded, it will be difficult for CES to identify new, unoccupied positions in them solely in terms of the discipline-based skills it is offering. Instead CES could differentiate itself by:

- making explicit the three types of skills sought by employers in those graduating from masters courses: 'personal', 'general' and 'discipline' skills
- indicating to prospective students how they will acquire and/or develop each type of skill whilst on the masters courses, and
- signal its 'placement' offer – which is one of the courses' only unique selling points at present – as a means of both demonstrating these skills to a would-be employer and exercising them in practice whilst still on the course.