



The Royal Academy
of Engineering

Engineering Activity Workshop

Tuesday, 20th April 2010

The Engineering Centre for Excellence
in Teaching and Learning (engCETL)

Loughborough University

The National HE STEM Programme & Engineering Activities

Heather Hawthorne, HE STEM Project Director
April 2010





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London Engineering Project

The Royal Academy of Engineering launched the London Engineering Project (LEP) in the summer of 2005. The Project was a determined and successful attempt to widen participation in engineering higher education.

The LEP was also a pilot project which brought together national organisations and some 40 London schools to encourage more students from under-represented groups to opt for engineering as a career.

The LEP worked on curriculum enhancement with university engineering depts. developing models to improve student learning experiences and make engineering more attractive to undergraduates.

Work in HEIs

The work has focused on three particular areas; these are:

- How to take an already established curriculum and develop new and innovative ways of delivery to enhance the student experience acknowledging the changing student profile due to widening participation successes
- Developing new degree programmes that maintain the required technical knowledge to deliver competent engineers, whilst expanding to embrace emerging technologies relevant to our changing society
- Promoting and nurturing links with key employers in the engineering sector and encouraging them to help in the development of new foundation degree programmes



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National
HE STEM
Programme

Engineering



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The HE STEM Programme

The National HE STEM Programme is a three-year initiative funded by the Higher Education Funding Councils for England and Wales (HEFCE/HEFCW).

The Programme aims to increase and widen participation in Science, Technology, Engineering and Mathematics (STEM) and enhance the skills and knowledge base of the workforce in these areas. Although focused around the STEM subjects, it will primarily concentrate its support on the disciplines of Chemistry, Engineering, Mathematics and Physics with concomitant benefits to the STEM sector as a whole.



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Allocated funds – Engineering

3 years from August 2009

HE Innovation Projects - £358k over 3 years

Engineering for Society - £63.5k over 2 years

Education Research - £48.5k over 2 years

HE focussed STEM activities - £250 over 2 years

Working with employers



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Allocated funds – Engineering 3 years from August 2009

The Royal Academy of Engineering will distribute funding to HEIs on the following themes;

HE Innovation Projects (including employer engagement)
Engineering for Society (including issues of diversity)
Education research

through a competitive proposal system.

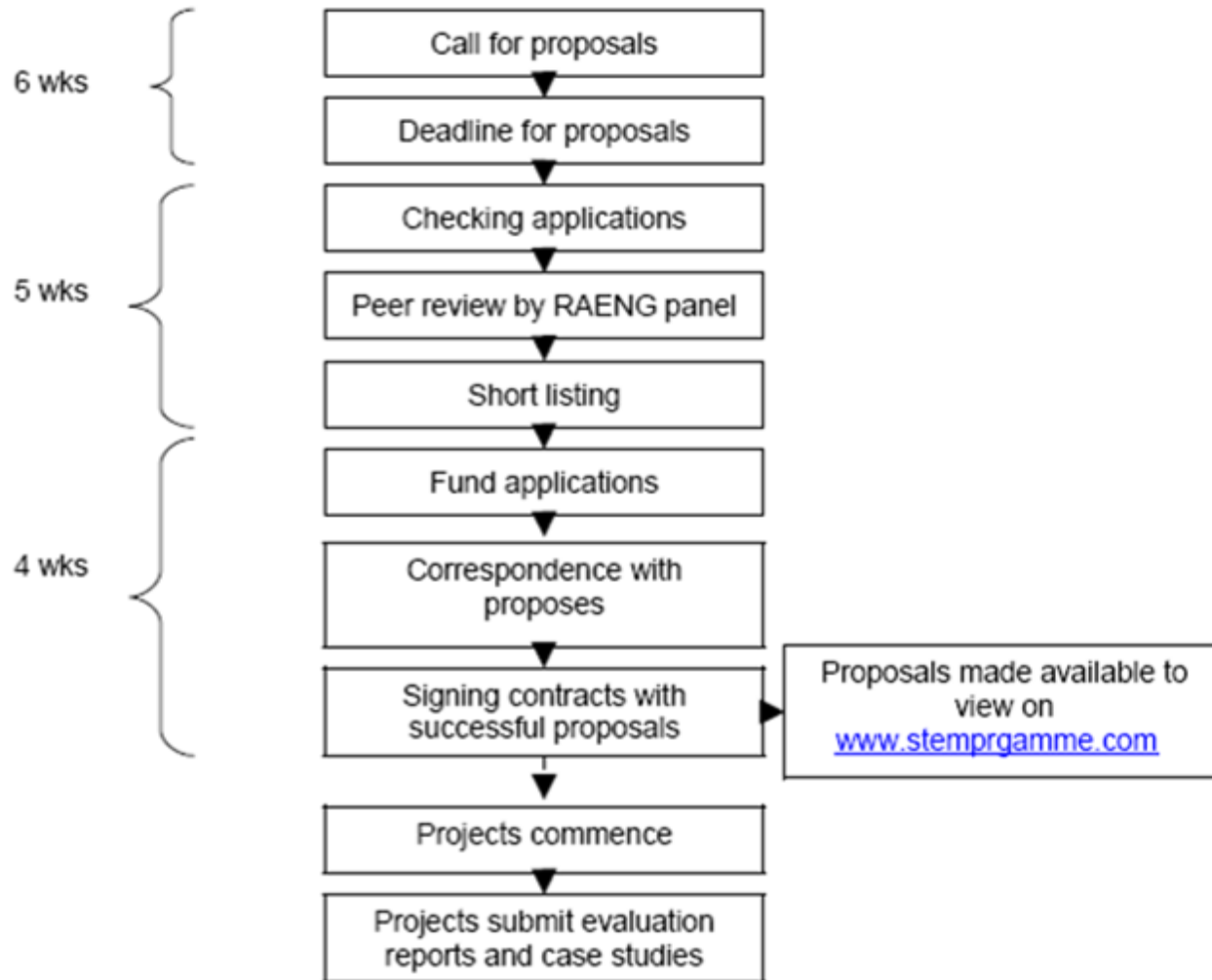
For the funding allocated to ***HE focused STEM outreach*** the Royal Academy of Engineering will work closely with regional spoke HEIs to ensure that these activities build directly on the work of the London Engineering Project and that the projects are sustainable beyond the lifetime of the National HE STEM Programme.



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Submission Process

First call closes: 1700 on Sunday, 16th May 2010





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Further information:
hestem@raeng.org.uk

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www.thelep.org.uk/national
www.raeng.org.uk/education/hestem

www.stemprogramme.com