Engineering ENGINEERINGGATEWAYS Council TOOLKIT FOR UNIVERSITIES



This section is an extract from the Engineering Gateways Toolkit for Universities



Background Research and Institutional Context



Are the principles and aims of the Engineering Gateways framework understood?

RESOURCES

- Information for universities [1]
- Guide to the Bachelors and MSc Degree in Professional Engineering [2]

STEP

Is the department aware of the IEng and/or CEng requirement related to the programmes it intends to offer?

►PROMPTS

- Are there IEng and/or CEng qualified staff who can help?
- Are there any Professional Engineering Institution (PEI) nominated liaison officers on staff or in the region who could help?

RESOURCES

• Benefits of registration with the Engineering Council [3]

STEP

Does the Engineering Gateways programme provide a strategic and operational fit with the university's aims and objectives?

PROMPTS

- Understand the benefits of the Engineering Gateways programme
- Map to university and departmental strategic aims and objectives
- Check this list of participating PEIs to confirm which disciplines can be supported

RESOURCES

- A summary of the <u>Engineering Gateways</u> <u>pathway and benefits</u> [2]
- Interim Review of the Engineering Gateways Development Fund Project (with feedback from all stakeholders) [4]
- Northumbria University's Work-Based Learning Framework Section 1, Strategic Context [5]

STEP

Does the university have the capability to deliver such a programme?

▶ PROMPTS

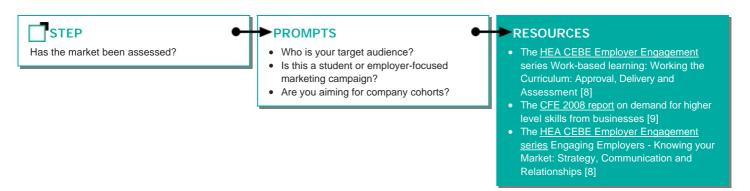
- Does your university offer similar programmes that you can learn from?
- What might be the critical success factors? Consider some of those put forward in the report about existing providers' views
- Have you identified possible challenges?
 The report into challenges perceived by new adopters might be useful background

RESOURCES

- Section 1, Institutional Readiness, of the WBL Maturity Toolkit (especially 1-1, 1-2, 1-10) may be useful e.g. to determine how prepared your department is to offer a WBL degree and what strategies and plans might need to be put in place. This toolkit is diagnostic and does not provide answers; the criteria should be used selectively [6]
- Northumbria University's Work-Based Learning Framework, Section 6, Management and Quality Assurance [5]
- Kingston University's comprehensive <u>MALA</u> (Masters Awards by Learning Agreement) framework [7]

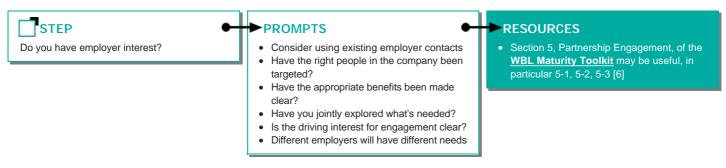
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Setting up an Engineering Gateways Programme



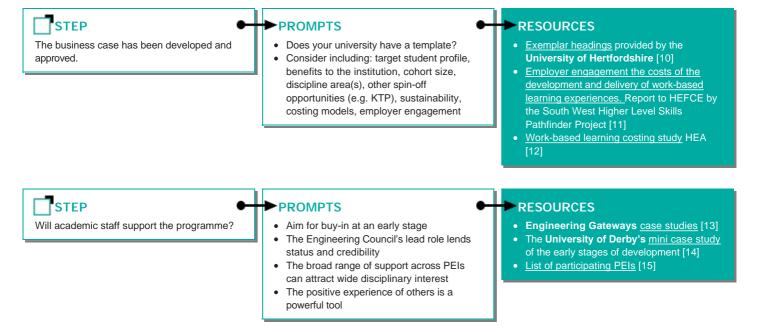
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Northumbria University



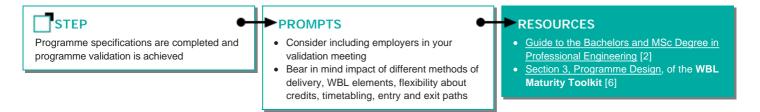
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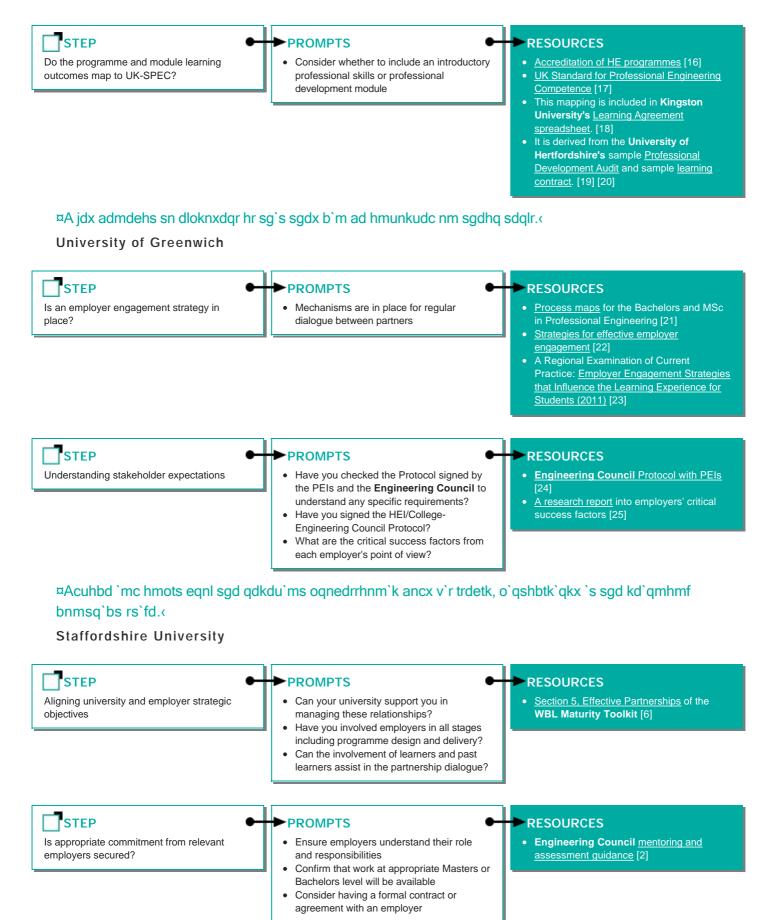
Northumbria University



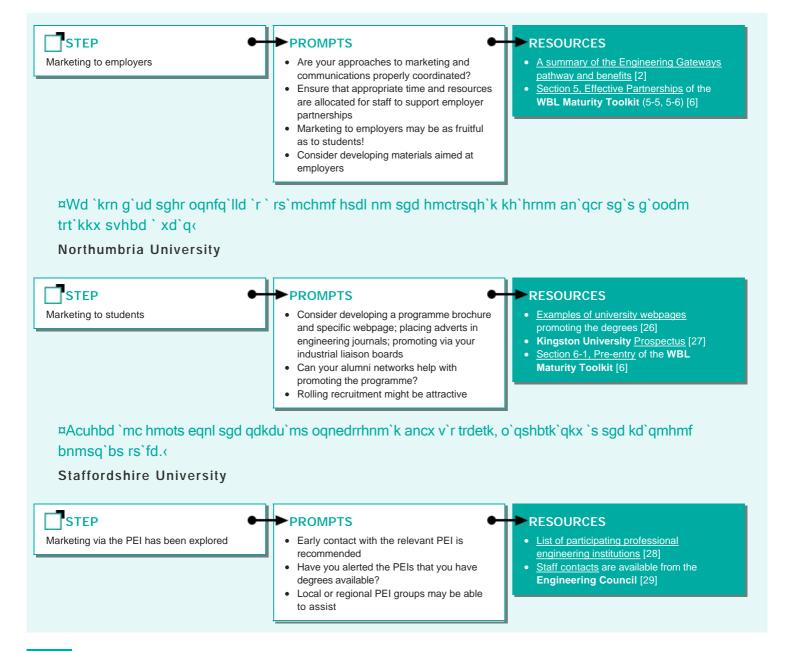
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Kingston University

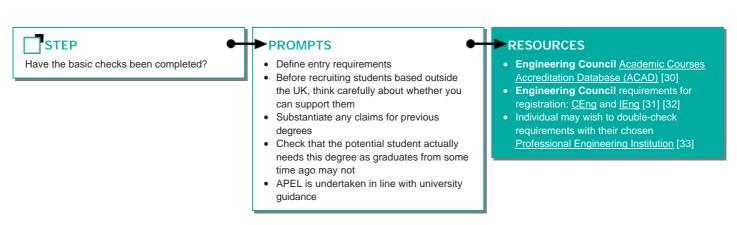




C Marketing the Validated Programme

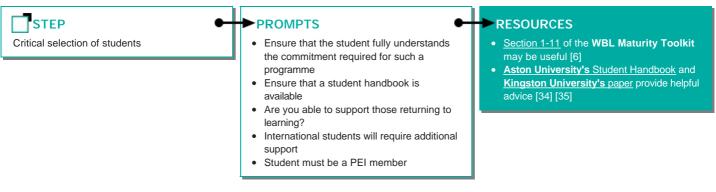


Student Recruitment



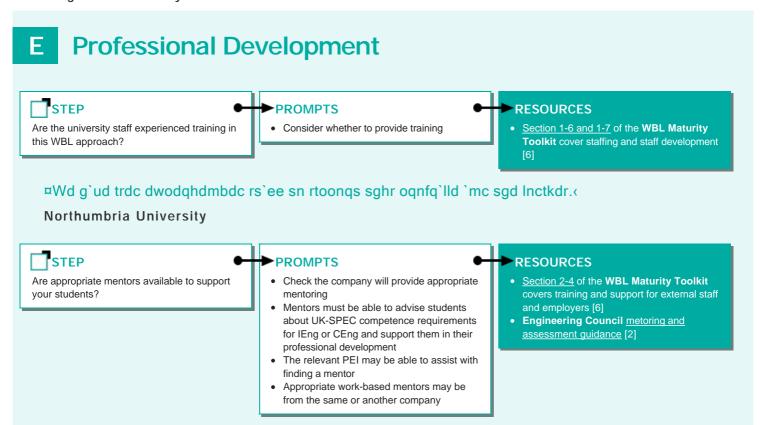
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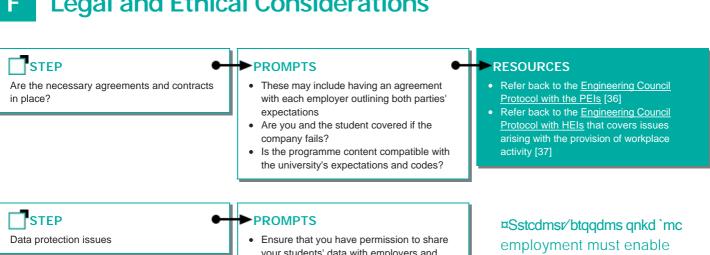


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Kingston University



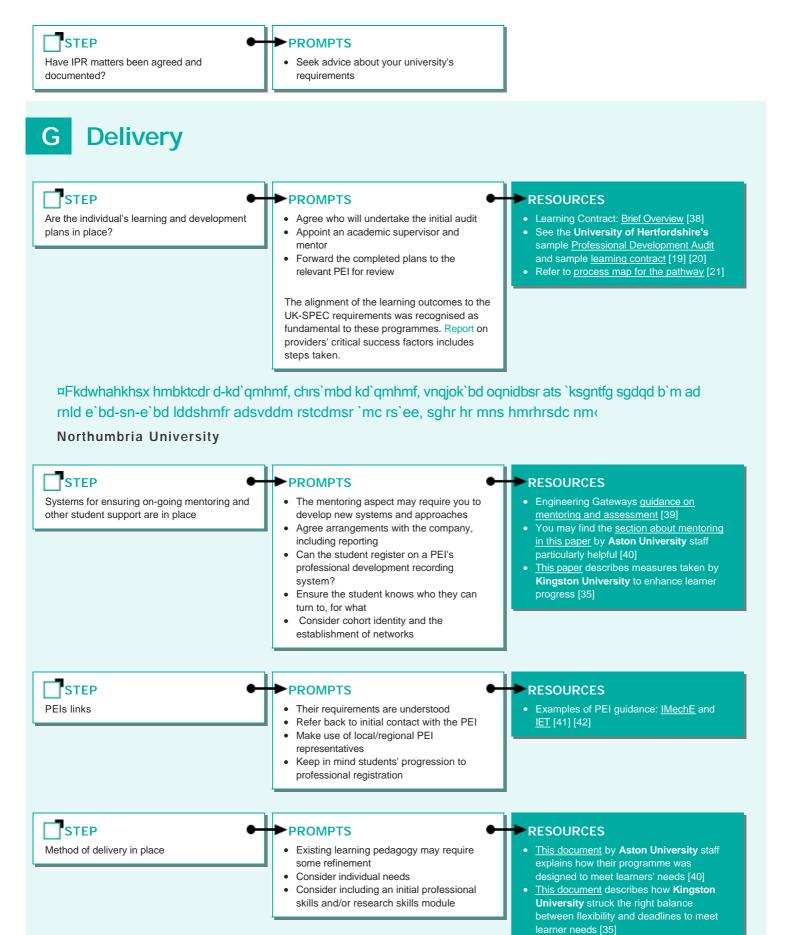
Legal and Ethical Considerations



Ensure that you have permission to share your students' data with employers and with PEIs so that progress can be tracked
 Is the in-company activity commercially sensitive?
 Might the confidential nature of the employees' work affect their ability to submit this for assessment?

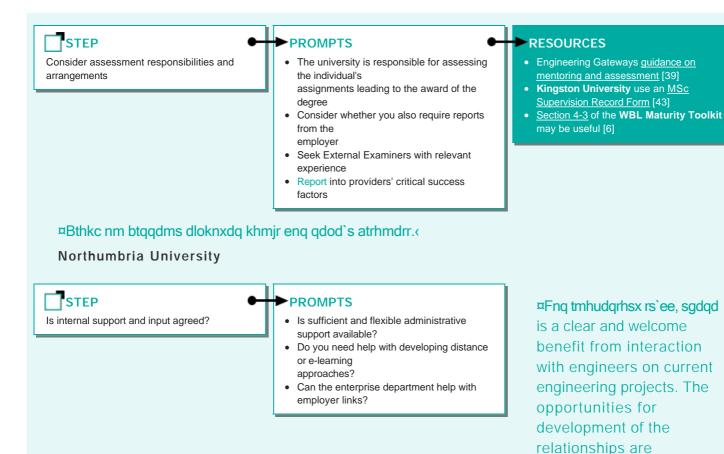
employment must enable access to live projects that they could use for sghr oqnfq'lld.

Northumbria University

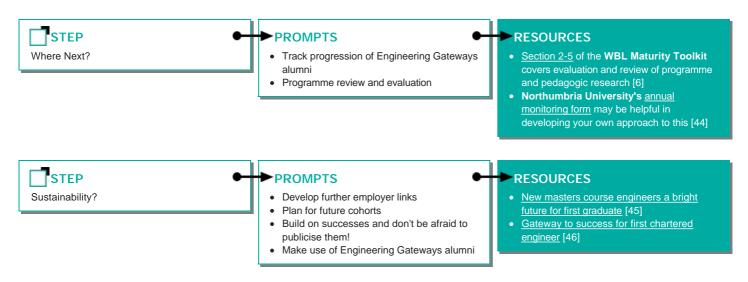


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Kingston University



H Where Next?



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Kingston University

Resource Links

- [1] http://www.engc.org.uk/engineering-gateways/Information-For/universities.aspx
- [2] http://www.engc.org.uk/engineering-gateways/publications.aspx
- [3] http://www.engc.org.uk/benefits.aspx
- [4] http://www.engc.org.uk/education--skills/engineering-gateways
- [5] https://www.northumbria.ac.uk/static/worddocuments/ardocs/436647.doc
- [6] http://wbltoolkit.pbworks.com
- [7] http://gatewaystoolkit.engc.org.uk/resources/kingstonmala.pdf
- [8] https://www.heacademy.ac.uk/sites/default/files/employer_engagement_1_cebe.pdf
- [9] http://gatewaystoolkit.engc.org.uk/resources/knownunknowns.pdf
- [10] http://gatewaystoolkit.engc.org.uk/resources/hertsbuscaseheadings.pdf
- [11] http://www.hefce.ac.uk/media/hefce/content/pubs/2010/rd2210/rd22_10.pdf
- [12] www.heacademy.ac.uk/sites/default/files/costing_work_based_learning.pdf
- [13] http://www.engc.org.uk/engineering-gateways/case-studies
- [14] http://gatewaystoolkit.engc.org.uk/resources/derbycs.pdf
- [15] http://www.engc.org.uk/engineering-gateways/engineering-institutions.aspx
- [16] http://www.engc.org.uk/ecukdocuments/internet/document%20library/AHEP%20Brochure.pdf

- [17] http://www.engc.org.uk/professional-qualifications/standards/uk-spec
- [18] http://gatewaystoolkit.engc.org.uk/resources/kingstonexamplela.xlsx
- [19] http://gatewaystoolkit.engc.org.uk/resources/hertsexample_pda.pdf
- [20] http://gatewaystoolkit.engc.org.uk/resources/hertsexamplewbl.pdf
- [21] http://www.engc.org.uk/engineering-gateways/learning-framework/process-map
- [22] http://gatewaystoolkit.engc.org.uk/resources/empengage.pdf
- [23] http://gatewaystoolkit.engc.org.uk/resources/regempengage.pdf
- [24] http://www.engc.org.uk/engineering-gateways/learning-framework/registration-protocol
- [25] http://gatewaystoolkit.engc.org.uk/resources/employerresearch.pdf
- [26] http://www.engc.org.uk/engineering-gateways/universities
- [27] http://gatewaystoolkit.engc.org.uk/resources/kingstonprospectus.pdf
- [28] http://www.engc.org.uk/engineering-gateways/engineering-institutions.aspx
- [29] http://www.engc.org.uk/contact-us
- [30] http://www.engc.org.uk/education--skills/accreditation/accredited-course-search
- [31] http://www.engc.org.uk/ceng
- [32] http://www.engc.org.uk/ieng
- [33] http://www.engc.org.uk/about-us/our-partners/professional-engineering-institutions
- [34] http://gatewaystoolkit.engc.org.uk/resources/astonstudenthandbook.docx
- [35] http://gatewaystoolkit.engc.org.uk/resources/kingstonheastem2012.pdf
- [36] http://www.engc.org.uk/media/49369/registration%20protocol%20for%20peis.pdf
- [37] http://www.engc.org.uk/media/49342/protocol%20for%20participating%20heis%20and%20fe%20colleges.pdf
- [38] http://www.engc.org.uk/engineering-gateways/learning-framework/learning-contract
- [39] http://www.engc.org.uk/media/48077/120404mentoringassessmentquidancerevised.pdf
- [40] http://gatewaystoolkit.engc.org.uk/resources/astonee2010.pdf
- [41] http://gatewaystoolkit.engc.org.uk/resources/imecheinformation.pdf
- [42] http://gatewaystoolkit.engc.org.uk/resources/ietguidance.pdf
- [43] http://gatewaystoolkit.engc.org.uk/resources/kingstonsupervisionrecord.doc
- [44] http://gatewaystoolkit.engc.org.uk/resources/northumbriaapm.doc
- [45] http://www.engc.org.uk/news-list/new-masters-course-engineers-a-bright-future-for-first-graduate

This toolkit has been developed to support universities wishing to offer Engineering Gateways degrees. Funding was provided for this work by the National HE STEM Programme. The toolkit was developed through a practice transfer partnership led by the Engineering Council. Five of the universities delivering Engineering Gateways degrees (Aston, Kingston, Hertfordshire, Northumbria and Staffordshire) contributed materials and experience, and acted as mentors to five further universities who wished to offer Engineering Gateways degrees (Coventry, Derby, Greenwich, Leeds Metropolitan and the University of the West of England). The Centre for Engineering and Design Education (CEDE) at Loughborough University assisted in developing the toolkit.











