Engineering ENGINEERINGGATEWAYS TOOLKIT FOR UNIVERSITIES



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

Delivery



STEP

Are the individual's learning and development plans in place?

PROMPTS

- Agree who will undertake the initial audit
- Appoint an academic supervisor and
- Forward the completed plans to the relevant PEI for review

The alignment of the learning outcomes to the UK-SPEC requirements was recognised as fundamental to these programmes. Report on providers' critical success factors includes steps taken.

RESOURCES

- Learning Contract: Brief Overview [1]
- See the University of Hertfordshire's sample Professional Development Audit and sample <u>learning contract</u> [2] [3]
- Refer to process map for the pathway [4]

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Northumbria University

STEP

Systems for ensuring on-going mentoring and other student support are in place

PROMPTS

- The mentoring aspect may require you to develop new systems and approaches
- Agree arrangements with the company, including reporting
- · Can the student register on a PEI's professional development recording system?
- Ensure the student knows who they can turn to, for what
- Consider cohort identity and the establishment of networks

RESOURCES

- Engineering Gateways guidance on mentoring and assessment [5]
- You may find the section about mentoring in this paper by Aston University staff particularly helpful [6]
- This paper describes measures taken by Kingston University to enhance learner progress [7]

TSTEP

PEIs links

PROMPTS

- Their requirements are understood
- Refer back to initial contact with the PEI
- Make use of local/regional PEI representatives
- Keep in mind students' progression to professional registration

RESOURCES

Examples of PEI guidance: <u>IMechE</u> and <u>IET</u> [8] [9]

TSTEP

Method of delivery in place

PROMPTS

- Existing learning pedagogy may require some refinement
- Consider individual needs
- Consider including an initial professional skills and/or research skills module

RESOURCES

- This document by Aston University staff explains how their programme was designed to meet learners' needs [6]
- This document describes how Kingston University struck the right balance between flexibility and deadlines to meet learner needs [7]

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Kingston University

STEP

Consider assessment responsibilities and arrangements

▶ PROMPTS

- The university is responsible for assessing the individual's assignments leading to the award of the degree
- Consider whether you also require reports from the employer
- Seek External Examiners with relevant experience
- Report into providers' critical success factors

RESOURCES

- Engineering Gateways <u>guidance on</u> <u>mentoring and assessment</u> [5]
- Kingston University use an MSc Supervision Record Form [10]
- <u>Section 4-3</u> of the WBL Maturity Toolkit may be useful [11]

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Northumbria University



Is internal support and input agreed?

▶ PROMPTS

- Is sufficient and flexible administrative support available?
- Do you need help with developing distance or e-learning approaches?
- Can the enterprise department help with employer links?

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Kingston University

Resource Links

- [1] http://www.engc.org.uk/engineering-gateways/learning-framework/learning-contract
- [2] http://gatewaystoolkit.engc.org.uk/resources/hertsexample_pda.pdf
- [3] http://gatewaystoolkit.engc.org.uk/resources/hertsexamplewbl.pdf
- [4] http://www.engc.org.uk/engineering-gateways/learning-framework/process-map
- [5] http://www.engc.org.uk/media/48077/120404mentoringassessmentguidancerevised.pdf
- [6] http://gatewaystoolkit.engc.org.uk/resources/astonee2010.pdf
- [7] http://gatewaystoolkit.engc.org.uk/resources/kingstonheastem2012.pdf
- [8] http://gatewaystoolkit.engc.org.uk/resources/imecheinformation.pdf
- [9] http://gatewaystoolkit.engc.org.uk/resources/ietguidance.pdf
- [10] http://gatewaystoolkit.engc.org.uk/resources/kingstonsupervisionrecord.doc
- [11] http://wbltoolkit.pbworks.com

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.











