



Professional Recognition and PG Cert in Engineering STEM Learning

Primary Engineer have created a GTCS accredited Professional Recognition course and PG Cert for Early Years, Primary and Secondary teachers and FE College lecturers designed to facilitate practitioners to develop their understanding of the STEM educational landscape, create stronger links within engineering and manufacturing industry to inform their practice and, building on both of these, undertake practitioner enquiry/action research to improve their teaching. This course is worth 60 Master's level credits towards an MEd at the University of Strathclyde.

Course Structure

Part One

Developing an understanding of the current STEM educational landscape

- Intro to Master's level reading and writing
- Engaging with educational theory, industry papers, etc.

Part Two

Building links with engineers to understand their inspirations and aspirations

- Fieldwork to interview a minimum of 6 engineers
- Sharing findings

Part Three

Practitioner enquiry /action research

- Identify a research questions and rationale
- Action research in the classroom

Course Delivery

The course is delivered online with the option of 7 twilight sessions spread throughout the year. The course runs April – April and therefore designed to fit around teachers' busiest times of year.

Assessment

Assessment 1

2000 - word essay into the STEM educational landscape

Assessment 2

15 - minute presentation into engineer interview findings

Assessment 3

Action Plan for practitioner enquiry/action research

Assessment 4

5000 - word action research paper



Teacher Evaluation

The strengths of the course are

“...the quality of training events, lectures and information which we have received. The rigor of the course has been a strength. I really feel I this has stretched me, deepened and broadened my understanding and given me real food for thought. The opportunity to spend time discussing EHOM with the primary engineer colleagues has been extremely valuable as has been the opportunities to get out and visit engineers in the workplace.”

Primary school teacher, 2016/2017 cohort

“the combination of university study with support from both Primary Engineer and professionals from industry. This gives both academic and industry views and helps support our development of learning approaches.”

Secondary school teacher, 2016/2017 cohort

Academic and Industry Endorsements

“Developing good attitudes and thinking processes when young should be a fundamental objective of education but we are only starting to be explicit about (a) the need to do that and (b) how we should do it. The Primary Engineer Engineering Skills course is well ahead of the game in this respect. It should be viewed as an important testing ground for ideas about how education can be made more relevant to the needs of society.”

Iain MacLeod, Emeritus Professor, University of Strathclyde and Secretary of IESIS

“The professional recognition course run by Primary Engineer is an outstanding example of meaningful and impactful STEM engagement with teachers. The teacher journey from having limited experience and exposure to engineering to developing a passion and well informed insight was both inspiring and impressive. I highly commend the team from Primary Engineer for their continued championing of engineering as well as the quality of guidance and support offered to teachers throughout the programme.”

Douglas Morrison, Curriculum Head STEM Industry Academies, City of Glasgow College

“It’s superb to see the impact that has been made not just on the young Primary Engineers, which is obviously very positive, but also the impact on their teachers. It’s genuinely heart-warming to hear educators say of the programme, ‘I didn’t think I could do this, but now I know that I can!’, and it is greatly encouraging to me to know that they’re applying that positive attitude and approach in looking after future generations of engineers.”

Dr Lynne O’Hare, Advanced Forming and Research Centre

Contact

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