

# Guidance Notes for Schools 2017

## Sponsors



## Supported by



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## STEM in the Pipeline 2017

STEM in the Pipeline was developed in 2006 by TechFest in conjunction with industry professionals. The project was designed to enable teams of pupils to apply their knowledge of school subjects to a realistic industry project and gives an overview of the variety of job roles available in the Oil and Gas industry. The project set is a challenging one – to produce a Field Development Plan. For extra guidance and a real life insight to the industry, pupils consult with a mentor team of professionals. The industry support is extremely valuable and pupils are expected to be similarly committed.

Pupils participating should ideally have achieved two Highers in Physics, Maths or Chemistry. STEM in the Pipeline is a great introduction to Geology. For many students the projects is also an introduction to a career in engineering, science and the oil and gas industry. Students interested in other disciplines develop valuable skills applicable to their chosen field.

### Key Dates for STEM in the Pipeline 2017:

- Introduction Day: Thursday 24<sup>th</sup> August, Fraser Noble Building, University of Aberdeen
- Project Submission Date: Friday 24<sup>th</sup> November, delivered to TechFest, Foresterhill Health Centre
- Presentation Day: Tuesday 5<sup>th</sup> December, BP North Sea Headquarters, Dyce

**The application form must be completed and returned by Friday 23<sup>rd</sup> June 2017 and confirmation of your school's place on the project will be sent out to schools by Tuesday 27<sup>th</sup> June 2017. We do not require the names of the students participating or photographic permission forms until Tuesday 22<sup>nd</sup> August but the sooner we can get them the better.**

Please note: places are limited and schools will be allocated a team on a first come first served basis.

### Disclosure Scotland

TechFest supports disclosure for all people who work with schools; however we cannot confirm that all presenters have been through the disclosure process. Schools should make their own risk assessment and ensure that members of the teaching staff are present throughout all presentations.

**Please note:** Teachers are expected to remain with the group at all times.

## STEM in the Pipeline 2017

### Part 1: Introduction Day – Thursday 24<sup>th</sup> August, University of Aberdeen

This is a full and busy day introducing the teams to the oil and gas industry and the project tasks.

Industry professionals and academics present a series of lectures and workshops, in Geology, Drilling & Reservoir, Finance, Processing, and Project Management. These workshops have been developed to inform and encourage the student teams throughout the day.



The pupils start working together in their newly-formed teams. They enjoy learning from friendly, experienced professionals and gain confidence through a series of practical activities. They find out each other's strengths and begin to identify weaker areas.

During the Introduction Day time is set aside for the school teams to meet the industry mentors who can help them during the project. Each team will receive two mentors: an oil and gas mentor and a separate project management mentor. What help can be offered and how to establish a reliable method of communication are two things addressed here. At the end of the day the project materials are distributed to the teams.

### Part 2: Project Work at School – August to December

The project consists of 4 consecutive tasks. Each pupil is expected to be knowledgeable and involved in each task. An approximate time to spend on each task is given. Overall each team member will spend at least 40 hours on the project, in most cases more.

The project work is on a new scale for the school teams. Teamwork, communication, planning and regular meetings are essential. Research and investigation is necessary before making decisions. Along the way they will need advice, support, guidance and reassurance from their mentor.

**Finally a project report is to be written detailing all of their work and results. Three hardcopies and one electronic copy must be submitted to TechFest by the deadline date Friday 24<sup>th</sup> November as well as the CREST profile form. Late entries will not be considered.**

The reports are forwarded by TechFest to the panel of assessors for their appraisal. This leaves the teams a couple of weeks to prepare for Part 3.

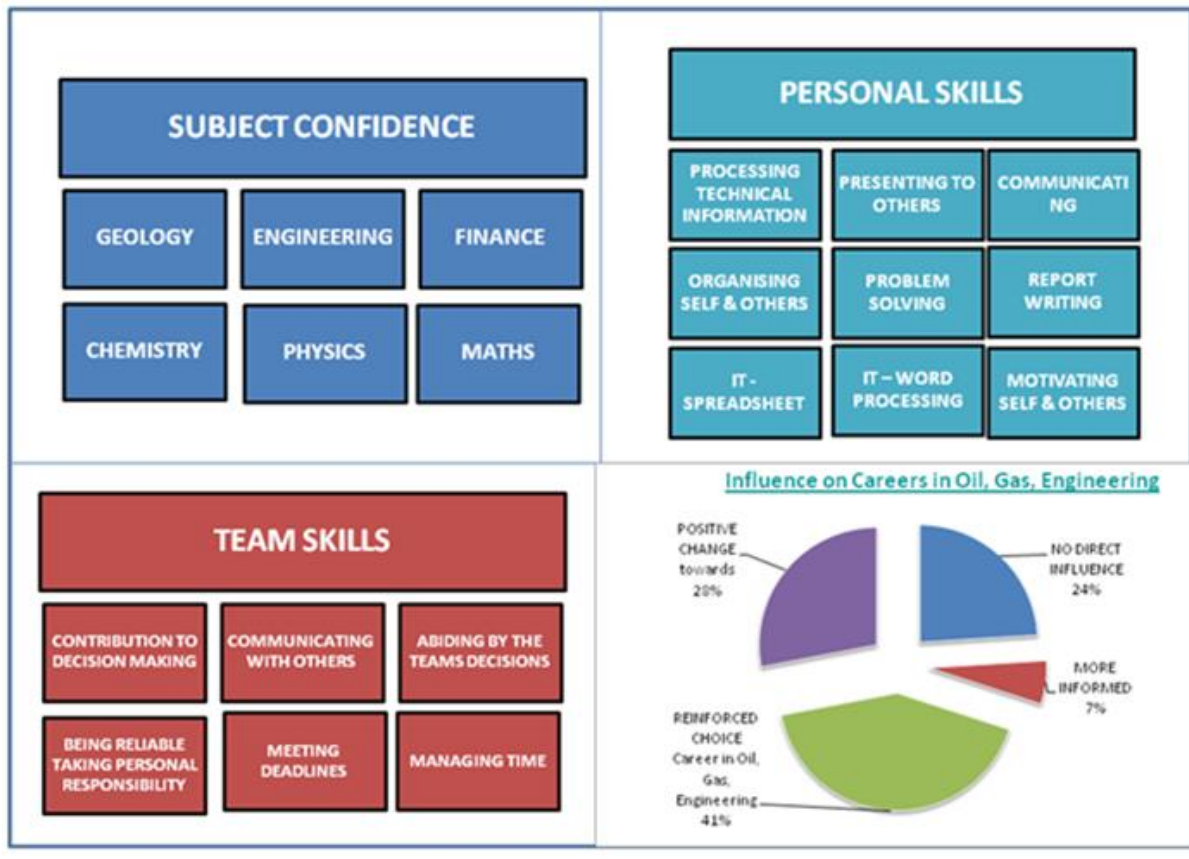
### Part 3: Presentation Day – Tuesday 5<sup>th</sup> December, BP North Sea Headquarters

This is the opportunity for the teams to give a presentation and display a poster of all their hard work. The atmosphere is very supportive. Each team has a display board and table top space for any models or additional resources. A group of assessors will visit each team for a brief presentation and interview. Invited guests and resident industry professionals offer further encouragement and advice to the students with informal discussions. The team will also be interviewed by a CREST assessor who will evaluate their project for a UCAS accredited Silver CREST Award. The teams receive written feedback from the panel. The day concludes with the prize giving and participation certificates.

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## STEM IN THE PIPELINE – Increasing Pupils Confidence & Skills



On completing STEM IN THE PIPELINE, previous students commented:

*“It has cemented my decision to be a Geoscientist”*

*“I like the problem solving part of this project and so I have decided to pursue a career in Chemical Engineering”*

*“This project has only strengthened my resolve to work as an accountant for the oil industry”*

*“Taking part in this project has made me realise I would like to work in the engineering sector”*