

## **The Geoscientific, Computer and Non-Technical Skills Needed in The British Based Oil Industry**

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Increased global competition has forced oil and service companies to restructure, develop new skills and adopt new work practices. Individuals unable to change or lacking these skills are now unemployed. Without industry input educators may be reluctant to redesign curricula to ensure that students acquire the right skill mix needed to obtain jobs upon graduation. Fifty-nine companies employing 360,000 people, including 6000 geoscientists, assessed the relative importance of 140 geoscientific, computer, business, soft and other skills in a questionnaire.

Principal findings were:

1. About 50% of the critical skills relate to Geoscientific competency, but computer skills are becoming increasingly important, particularly within the service industries.
2. Increasingly, the minimum qualification required for employment is a Masters degree.
3. About 25 geoscience topics comprise the core of the oil industry skill set.
4. Geophysics plays an important part in this set, although many key topics are now multidisciplinary.
5. The relative importance of soft skills increases from the smaller companies through the independents to the majors.
6. Some traditional skills have become obsolescent while several courses needed to satisfy new skill requirements seem unavailable. This is also true for non-technical skills: particularly Ethics and Teamwork.
7. Most employers have failed to recognize the importance of language training, international experience and cultural awareness in the new global environment. Universities can help here.

Students need better advice concerning course selection and career opportunities. This could be overcome were employers and geoscience faculty to improve cooperation and communication. While many employers seem very willing to participate, some faculty seem reluctant to change. This is detrimental to all.