The impact of a doctoral career

Information for doctoral students and those considering undertaking a doctorate

Physical Sciences and Engineering Doctoral Graduate

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About this factsheet
This factsheet has been produced for current or potential doctoral students and those who support and advise them. It is informed by the Doctoral impact and career tracking study conducted on behalf of Research Councils UK (RCUK) and the higher education funding bodies for England and Wales (HEFCE and HEFCW).

The factsheet provides key statistics and examples of achievements and impact for graduates of the Physical Sciences and Engineering. It is complemented by a briefing containing a general overview of the findings of the Doctoral Impact and Career Tracking Study.

Where are doctoral graduates working seven to nine years on? (%)
Excluding graduates working in higher education. Survey response: 340

Find out more
A copy of the full report, along with shorter briefings targeted at policy makers, employers and current and potential doctoral students can be found here:
http://www.rcuk.ac.uk/skills/impact/

Survey data from the study will be deposited with the UK Data Archive for other researchers to use:
http://www.data-archive.ac.uk/

* Average salary is median salary for survey respondents in full-time employment in one job in the UK.
How satisfied are doctoral graduates with their career to date? (%)

Survey responses: Physical sciences and engineering: 590 / Total sample: 1,818

<table>
<thead>
<tr>
<th>Job role</th>
<th>Physical Sciences and Engineering graduates</th>
<th>All doctoral graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all satisfied</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Not very satisfied</td>
<td>47%</td>
<td>46%</td>
</tr>
<tr>
<td>Fairly satisfied</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>Very satisfied</td>
<td>46%</td>
<td>41%</td>
</tr>
</tbody>
</table>

“I think it’s given me an excellent way of approaching problems [...] and I have a good network of people that I still work with today. It allowed me to get a really good job and progress through that company probably quicker than I otherwise would.”

Physical sciences and engineering graduate.
“Doing my PhD really made me grow a lot as a person. I made a huge transition - before I was very much a student being set spoon fed tasks and learning how to do them and getting good marks, then I moved to an environment where you have to very much drive yourself. That’s really what I came out of the PhD [...] You are learning how to take control of your own work and your own research and to have confidence that you can achieve.”

Physical sciences and engineering graduate.

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### Extent to which doctoral experience enabled graduates to... (%)

Survey responses: 580-590

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Some extent</th>
<th>A great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate complex information to non-specialists</td>
<td>7</td>
<td>48</td>
<td>45</td>
</tr>
<tr>
<td>Solve problems</td>
<td>2</td>
<td>29</td>
<td>69</td>
</tr>
<tr>
<td>Think creatively</td>
<td>3</td>
<td>37</td>
<td>60</td>
</tr>
<tr>
<td>Be innovative in the workplace</td>
<td>7</td>
<td>48</td>
<td>45</td>
</tr>
</tbody>
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### Since graduating Physical Sciences graduates have...

- Sped up the analysis of intelligence data from days to hours
- Led on national security work that was briefed to the White House leadership
- Helped sports people improve their performance
- Developed a new product to measure levels of radiation
- Been named as inventor on patent applications
- Published research subsequently used by NASA and the European Space Agency

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### In the words of their employers...

“Doctoral graduates are involved in keeping abreast of the goings on, not only within our industry, but within adjacent industries and within their field as a whole. Then coming forward and suggesting ways in which we can use some of those technical advances to our benefit.”

Small employer, manufacturing and engineering.

“[Doctoral graduates] are more prepared to fit straight into a role, unlike others who can take time to get up to speed. They all have energy and enthusiasm when they come to work for us, [...] but those with doctorates tend to be more mature and experienced. They are easier to fit into the business.”

Large employer, research and development.

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