University of Birmingham

 Employability Audit

 Report detailing findings of employability audit of the undergraduate programmes of the School of civil Engineering, University of Birmingham
INTRODUCTION

This report details the findings of an employability audit that was carried out at the University of Birmingham for the school of civil engineering. The audit was conducted as part of an HE STEM initiative, looking into how key employability skills were taught through the degree programmes offered at the University of Birmingham in civil engineering, including “with energy engineering” and “with business management”.

The study was conducted by students from the degree programme, with students from each year taking part and assessing the modules taken in each year. It focussed on modules being taken in the academic year 2011-12 and students assessing their current year of study.

The key employability skills as identified by HE STEM research are:

- Communication
- Numeracy
- Team working
- Problem solving
- Project management
- Research skills
- Self management
- Commercial awareness
- Creative thinking
- Positive attitude to work
- IT Skills
- Career management

AIMS AND OBJECTIVES

This report aims to detail the findings of the employability audit carried out in the academic year 2011-12. From these findings an assessment will be made about the civil engineering degree programmes about how well the employability skills, suggested as important by the HE STEM research, are covered. From this the following objectives are hoped to be achieved:

- Identify any skills that are not covered by the degree programme
- Assess which skills are covered, but more focus could be given
- Make suggestions on how skills found to be lacking can be enhanced
- Utilise the methods that allow some skills to be taught well to improve those that are lacking

METHODOLOGY

Initially a review was carried out of the modules students were currently studying in their year. Data was collected for each year and at a module level and can be found in the appendices. Each module, in each year, was scored out of 10 for how well it covered the 12 employability skills set used by HE STEM. The scores from each module were then combined to give an overall rating, as can be seen in the spreadsheets in the appendices, for each skill for that particular year.
These results were then used to create radar chart, an example of which is shown in the “Achievements to date” section of the toolbox created for this project. These radar charts can be used to visually show the level of skills represented in each year and those skills which are adequately included or under-represented can be identified readily.

Unfortunately there were limited students taking the Civil Engineering module “with energy engineering” and also “with business engineering”, and with limited time it was not possible to get assessments of these modules completed. For this reason no result or analysis of the additional modules taken by these degree programmes has been included. However, the core modules of both degree programmes are made up those covered in the straight Civil Engineering degree programme.

CIVIL ENGINEERING AUDIT RESULTS

FIRST YEAR

FIGURE 1

Weak areas

The main weak area would be career management, as one can see from the radar chart it scored significantly lower than other employability skills evaluated. In addition positive attitude to work, creative thinking and commercial awareness all came below average, with IT skills just above average.

Improvement could also be made to incorporating skills such as commercial awareness, creative thinking and a positive attitude to work.

Strong areas

The strongest area would be numeracy, helped by the Modeling Concepts and Tools (MCT) module taken by most of the engineering students in the first year. This is an essential module that helps
ensure that everyone has been exposed to the same level of mathematics having come from different backgrounds at A level.

Additionally research skills is ranked highly, perhaps in part due to the report on bridges carried out in the first term where the students are made to write a report based entirely on their own research, with no structured teaching on bridges.

Suggestions

Use the construction and design professional skills (DPSa) module to bring in some lecture times dedicated to career management, commercial awareness, creative thinking and a positive attitude to work.

IT skills are more focused on in later years, and thus less emphasis is required on this in 1st year. Though perhaps some aspect of it could be covered in the report writing lecture given at the start of 1st year.

Although positive attitude to work, creative thinking and commercial awareness all came below average, with IT skills just above average, this is due to the fact that not all of the current first year modules contain the scope to cover these skills. However they are covered within specific modules to a degree that satisfies this audit.

SECOND YEAR

FIGURE 2 - SECOND YEAR

Weak areas

As with first year, the weakest area is career management followed by commercial awareness, creative thinking and a positive attitude to work. Team working and project management skills have also scored much lower in second year; this could be due to there being less group projects in 2nd year and more work focusing on individual submissions.

In comparison to 1st year the scores for research, self management and creative thinking have also decreased considerably.
**Strong areas**

Numeracy remains the strongest skill gained in 2nd year, followed by problem solving and communication. In comparison to 1st year this has scored even higher, which is not in keeping with the rest of the scores which mostly are lower than the 1st year scores.

**Suggestions**

More focus is required on career management and commercial awareness, something that could be included more readily in the construction design and skills (CDS) module and/or the construction practice management (CPM) module.

The scores for all the skills, except numeracy, are lower than 1st year. This is perhaps due to the nature of the modules taken in 2nd year being much more focused on theoretical aspects of engineering. The floods and river systems module (FRS), as an example, contains a lot of derivation of equations, and perhaps more focus could be on how the module applies in the industry.
THIRD YEAR (BEng)

FIGURE 3 - THIRD YEAR BEng

**Weak areas**

Once again the weakest area is career management. This is concerning as for third year BEng this is the final year before graduation, and career management has not been covered at all by the degree programme.

**Strong areas**

Numeracy remains the highest scoring skill due to the nature of the degree subject.

Self-management, communication, team work and research all score much higher than in previous years. This is likely due to the self-guided research project undertaken in the third year as well as a group design project, all of which allow these skills to be developed.

**Suggestions**

Emphasis on commercial awareness and career management are desperately needed. At the end of third year BEng students will be graduating and applying for jobs, however the degree programme has not aided them in career management or allowing them to be more commercially aware.
THIRD YEAR (MEng)

**Weak areas**

As is a developing theme across the degree programme, career management is the weakest area.

What is concerning is the low score for the project management skill, when 3rd year MEng contains a module dedicated to project management. This needs to be looked into further to see why this module is not producing a high score in project management.

**Strong areas**

Self-management rather than project management, however, is the strongest skill for 3rd year MEng.

Team work, communication, research and numeracy skills all score highly as well. This is likely to be due to the inter-disciplinary design project (IDP) that allows for the students to work with chemical engineers also in their 3rd year, giving a much greater experience of working in mixed design teams.

**Suggestions**

Similarly for 3rd year BEng, there is a distinct lack of emphasis on career management.

Additionally, more focus needs to be taken account of project management and why the management module is not meeting the requirements of teaching project management.
**FOURTH YEAR**

**FIGURE 5 - FOURTH YEAR**

**Weak areas**

Positive attitude to work and career management skills are the two weakest areas identified in 4th year. Something that can be a concern, as like with 3rd year BEng, this is the year prior to graduating, there is very little sign that the degree programme has prepared students for applying for jobs.

Team working and creative thinking, as well as project management, also score quite low. However, this is less concerning as they are covered more in previous years. The focus in 4th year shifts away from group work and more towards individual working. There is still some work that involves team working, so these skills are kept up to date but not developed on as much.

**Strong areas**

The scores achieved for the stronger areas, are much higher than those ranked in 3rd year. Problem solving scores highly, which is likely to be related to the modules in 4th year being much more focused on practice of skills learnt in the years before. Rather than being taught how to do particular numerical methods the focus is much more on putting this into practice, thus problem solving scores highly.

Additionally, research skills and self management score highly due to the 4th year individual research project. This is the first chance MEng students get to do their own research, similar to the project carried out by 3rd year BEng students. Self management is essential to getting the project done on time, while continuing with other studies that are ongoing at the same time.

**Suggestions**
Again more focus on career management is required. This is a recurring theme throughout the degree programme and needs to be the main focus. Some lectures perhaps in the first term of 4th year to start people thinking about graduate applications.

**SUMMARY AND RECOMMENDATIONS FOR CIVIL ENGINEERING**

For all year groups, more of a focus on career management and commercial awareness is needed. There is a definite weakness in the area of career management for every year group and although the Engineering department has excellent career support and the university offers sessions to improve your CV and interview techniques, to accommodate this skill into the curriculum within the Civil Engineering degree additional lectures are required. In first year an additional lecture could be added to the Design and Professional Skills A module. This is a module that currently provides the skills that are needed when entering the professional world of Engineering and would be a suitable place to meet this need.

However, this skill needs to be carried through the rest of the degree programme, building on basics taught in first year. As such additional lectures, that are compulsory, need to be included in each year. Though there is support available to students through the careers service, there is no guarantee that this will be used by all students. Experience has shown a reluctance to attend career focussed lectures and thus the importance of these lectures needs to be shown to students.

Lastly, further details on evaluation of how the audit itself was carried out can be found in the “Evaluation” section of the audit toolbox created as part of this procedure.
The recruitment for this audit was done via a questionnaire produced by Andrew Chan and Jenny Illingsworth with an optional meet and greet if you were interested in being part of the audit. There were only 9 people who volunteered to be part of the audit and over a lunch time meeting on 22\textsuperscript{nd} Feb 2012 it was agreed all would be involved. At this meeting the project was explained, and a copy of the audit produced by Exeter University was shown as an example.

The team was constructed of the following people:

<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joanna Maguire</td>
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<td>Tom Wragg</td>
<td>Second Year</td>
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<tr>
<td>Mark Lever</td>
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<td>Mohammad Bilal</td>
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<td>Philippa Jefferis</td>
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<td>Simon Lee</td>
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<td>Mark Hipwell</td>
<td>Third Year</td>
</tr>
<tr>
<td>Sarah Blick</td>
<td>Fourth Year</td>
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An additional 4\textsuperscript{th} year student Kelvin Rose also had hoped to take part, but due the high demand of the fourth year course he was unable to dedicate much time to the project. This is something that Sarah Blick also found a struggle, and thus was unable to participate in discussions as much as desired.

The first meeting official meeting of the team on 7\textsuperscript{th} March was used to assess what direction the audit was to go, how best to carry it out and what tasks needed to be completed to achieve the overall aim. It was decided at this meeting to follow a similar method used by Exeter University for their audit. The aim had been to carry out a full study of the three main degree programmes offered was aimed for: civil engineer; civil engineering with business management and civil engineering with energy engineering. However, due to time constraints and lack of available students an audit was only fully carried out on the straight civil engineering degree programme.

The final audit has produced a report detailing the strengths and weaknesses of the civil engineering degree programme offered by the University of Birmingham. These areas were based on the employability skills as identified by the HE STEM research. Suggestions were then made for improving on the skills found to be lacking in the degree programme, taking account of how the stronger skills were successfully taught.

The main finding of the audit was a distinct oversight on including “Commercial Awareness” in the degree programme, as this scored very low in every year. This was easily identified on the radar charts produced for each year group that can be found in the report (File 01. Audit report) written summarising the results of the report. It is hoped that these can be combined into one radar chart to show the overall degree programme score. It has also been considered that the radar chart could be colour graded with a traffic light system, with the green band being the final aim to have all the results within it, rather than in red or orange with the zoning determined through consultation with employers and industrial advisory board.
An example radar chart is shown below and the full analysis of the results can be seen in the document “Employability audit findings report”.

![Radar Chart](image)

**FIGURE 6 - EXAMPLE RADAR CHART**

Figure 1: Radar diagram depicting the extent of provision of the key employability skills for Civil Engineering year 1

An example of the original evaluation form used i.e. the three point scale one can be found with the results collected in the table in the form of Table 1.
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<th>Problem</th>
<th>Project Management</th>
<th>Research</th>
<th>Self-management</th>
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<th>IT Skills</th>
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**TABLE 1: DATA USED TO PRODUCE THE RADAR DIAGRAM FOR MENG THIRD YEAR.**
Dissemination will be focused towards the School of Civil Engineering and any National HE STEM Programme activity that has been carried out at the University of Birmingham.

The regional HE STEM Programme team will host an evening event on 3rd July, showcasing the projects supported and where the national programme has impacted the University of Birmingham, as outlined below:

The Midlands & East Anglia Spoke of the National HE STEM Programme would like to invite you to a networking event to celebrate the work undertaken in our region under the HE STEM Programme.

17.00-18.30: Showcase of HE STEM projects and networking.
19.30: Dinner.
20.00: Keynote presentation by Professor Geoff Layer, Vice Chancellor of Wolverhampton University.

A poster will be presented at this event. Attendance of approximately XX is expected.

The university’s College of Engineering & Physical Sciences, the academic grouping to which the School of Civil Engineering belongs, encourages communication between Schools. This communication includes newsletters for staff and students and an article on this project will be included into each relevant communique. The project may also be disseminated via the Midlands & East Anglia regional website, www.hestem-mea.org.uk. The findings will also feed into the module review process currently being undertaken in the School of Civil Engineering. On one hand, it will serve to highlight employability issues to the module leaders and on the other hand, the findings will be used to enhance the inclusion of employability related issues in the modules. The information will also feed into the programme review of the School with the view to considering the balance between the various employability skills and its distribution throughout the curriculum, as well as the involvement of visiting lecturers in the school. Currently most, if not all, the visiting lecturers, most of them practicing engineers in commercial companies, lecture on technical matters and it is the intention of the school to involve the visiting lecturers in enhancing the employability skills of our students.

Finally, the School’s Industrial Board will welcome this information, as it provides industrial comment and input into the curriculum. Comments from the Board, most of whom employ the School’s graduates, will be welcome in support of the above module review.
The final evaluation was mostly focused on data analysis collected during the audit. The data collected was for each year and at a module level and can be found in the folder Appendix A. Each module, in each year, was scored out of 10 for how well it covered the 12 employability skills set used by HE STEM. The scores from each module were then combined to give an overall rating, as can be seen in the spreadsheets in the appendices, for each skill for that particular year.

These results were then used to create radar chart, an example of which is shown in the “Achievements to date” section (File 02. Achievements to date). These radar charts can be used to visually show the level of skills represented in each year and those skills which are adequately included or under-represented can be identified readily. This was exceptionally good at showing exactly where the strong and weak areas were, and, more importantly, made a good visual impact. At a glance it was often obvious which key skill was neglected in that year. It is hoped that these radar charts can be combined then form a radar chart for the entire degree programme, allowing for the fact that some skills were neglected in one year but focussed on heavily in another year. From this, a clear picture of the skills missing from the degree programme can be easily identified. Additionally the skills that are well covered are also evidently shown.

The aims of the data analysis were to: Identify any skills that are not covered and make suggestions on how to teach the skills found to be lacking; assess which skills are covered, but could be focused on more and utilise existing methods or develop new methods to teach the skills that are found deficient. By identifying the skills that are well covered by the degree programme, and how this is achieved, could enable suggestions for how to improve the weaker areas but completely new ideas, suitable to the skill being taught, may also be required to achieve higher scores in certain skills.

Once recommendations have been made, and implemented, then a new audit would need to be undertaken to assess whether these changes have made any impact. This secondary audit would need to be carried out a minimum of a year after the changes have been implemented to ensure students have had a chance to experience these changes. Then, following the same format as before, the results from the second audit could be compared to those of the first. From this the impact of the audit can be tangibly measured.

The subsequent audit should, where possible, utilise existing team members from the initial audit. However, this may not be entirely possible and it would also be of benefit to include new team members to keep the project fresh. The civil engineering department already has a Staff Student Committee which would be a good place to announce results to students and staff simultaneously, however, it would also be necessary to have a discussion with the head of school and the school learning and teaching committee in order to implement any changes required in the school. If this audit process is deemed a success then it could be rolled out to other schools within the Engineering and Physical Sciences college at the University of Birmingham.
We faced a few issues whilst trying to complete our employability audit at the University of Birmingham. The greatest challenges we had to deal with were the short time frame that we had to complete the audit, with exam and revision periods occurring during our audit we had to run to a tight schedule. Also a key issue was organisation, trying to get several different years and degree types all in one room for an audit meeting at the same time proved to be difficult. Each issue is explained in greater detail in the below sections:

**Team Structure:**

- **Issue:** Our employability audit began with several meetings and discussions about how the audit should be completed. Every member of the team was on a level footing for each meeting, this can lead to arguments over decisions and how we should move forward. It can also cause work not to be completed as quickly as possible and progress could be slow, or cause confusion as to what work was being completed by whom. There are some advantages of this team structure because wide range of opinion can be expressed and option considered. The reason why this model was chosen is mostly because a fair and open participation was expected but this may not be the most suitable team structure given the time constraint. Further discussions would be needed to identify the best team structure to be employed. Furthermore, discussions should be made on the role and involvement of academic staff such as Andrew Chan and Jenny Illingsworth.

- **Recommendation:** Form a team structure at the start of the audit, perhaps a team leader position or secretary to ensure work is completed by certain timelines and checked it matches with other work completed. Also they can designate jobs to each member of the audit. These positions can be arranged at the start of each week allowing for every member to have a go.

**Meeting:**

- **Issue:** The lack of team structure made it difficult to get the team together for meetings to organise work that needed completing. This meant that not all team members could make the meetings because of other commitments.

- **Recommendation:** Have a team structure and select a team meeting time that suits everyone and stick to that time each week rather than change it weekly. Another possibility is subgroups for the audit, each year could have their own mini audit and then group together at a main meeting, thus making it easier to organise meetings. Tasks could be assigned earlier so that technology can be used to cover the lack of time to meet each other.

**Meeting Attendance:**
o Issue: The audit was started late on in the year which was close to the Easter vacation and was partially completed in the exam period; this led to difficulties on getting all team members in a meeting at the same time.

o Recommendation: Use technology and common internet programs such as dropbox, skype and email to keep everyone up to date as to what work has been completed, this was used to good effect for preparation for the Exeter University PTA meeting. Also begin the audit earlier in the year, give students an opportunity to complete the work when exams and revision is not getting in the way.

**Business and Energy students:**

o Issue: There was a lack of students that were completing civil engineering degrees with major in Civil Engineering and minor in subjects such as Business management or Energy engineering. Making it difficult to complete a comprehensive audit for all the students studying civil engineering.

o Recommendation: Ensure that students that complete the audit cover all the joint honours and variants of the degree that you have decided to audit. If it is difficult to recruit these students to complete all the audit then perhaps 'sub-contract' them for small sessions. Considerations should be made on whether there is a need to audit the whole of the minor programme as the number of modules specific to these major/minor programme is limited. Furthermore, we can ask non-Civil Engineering students taking those modules to evaluate the module for us. Obviously some sort of benchmarking could be needed as they may have different opinions of the 12 employability skills used. Some discussions at the beginning so that a reasonably clear metric is used to evaluate each of the skills involved.
The University of Exeter provided materials for us to help kick start our employability audit; these materials gave us a template of how to complete an employability audit but allowed us the freedom to complete the audit differently if it did not quite match up with our modules/degree:

**ASSESSMENT OF THE DEGREE OF EMPLOYABILITY SUPPORT INTEGRATED WITHIN A MODULE**

This was a questionnaire sheet that allowed the students to number each of the 12 core employability skills for each of the modules. We used these 12 skills as well in our employability audit as we felt that they were a good set of skills to measure and were happy to audit them. The descriptions that came with each of the 12 skills were also a good set of descriptions of the skills so we stuck with these. We had several discussions over how we felt best described the ‘taught’, ‘practised’ and ‘assessed’ sections of any modules on our degree, we felt it was important to make sure that that was explained clearly as some students may confuse with their personal feelings about a lecturer or module.

This source material was very useful; it gave us a good starting point for our employability audit. The skills and descriptions were good for our radar diagrams.

**EMPLOYABILITY AUDIT PTA**

For the Employability Audit meeting on the 13th of February 2012 there a group of slides produced. Re-reading these PowerPoint slides gave us a good idea of the aims and objections of the Employability Audit. Making sure that we stuck to the aim that it was ‘student led’ and was to ensure that it was not just a check of the skills but also to look for skills development in the modules.

It also provided us with a good timeline to work with:

- 2 days of understanding and explaining the employability skills and the detailed audit.
- 2 days researching and refining suggestions and improvements for the modules.
- 2 days compiling the report and reviewing any recommendations.

We did not stick to this timeline religiously due to difficulty in getting students together for meetings (as explained in ‘issues’) and other reasons however this was a good starting position.

**OTHER MATERIALS**

The University of Exeter provided plenty of additional very usual materials for the University of Birmingham to use during our Employability Audit however it was felt that the two most useful pieces of source material were from the previous audit and meetings.
Below is a list of the milestones of the project to date.

- **Spread sheets**

After deciding that we wanted to complete a numerical evaluation of the modules we created a spread sheet in excel as can be seen in the appendices. Initially done for evaluating the first year modules it was soon adopted by the other students to evaluate their own year groups. This was also an easier way to get outside students, specifically those studying civil engineering with business management, to evaluate their modules. This meant that there was consistency in the way we were grading the modules with a simple 1-3 rating on whether the module was taught, practiced and assessed.

The spreadsheet provided an initial starting point for the

Initially a full study of the three main degree programmes offered was aimed for: civil engineer; civil engineering with business management and civil engineering with energy engineering. However, due to time constraints and lack of available students an audit was only fully carried out on the straight civil engineering degree programme.

- **Radar graphs**

The decision to present the data in a radar graph was decided in the third meeting. We believe and feedback from the presentation day in Exeter has confirmed that it is an easy and effective way of presenting what we discovered from our evaluations. We hope to receive feedback from companies and assimilate that information into the existing radar chats, we believe that it will be a powerful indicator into what the companies want from graduating students and where it is, and is not being provided by our degree.

It is hoped that each year groups individual radar chart can be combined into one radar chart to show the overall degree programme score allowing for the fact that some skills were neglected in one year but focussed on heavily in another year. From this, a clear picture of the skills missing from the degree programme can be easily identified. It has also been considered that the radar chart could be colour graded with a traffic light system, with the green band being the final aim to have all the results within it, rather than in red or orange.

- **Presentation**

The presentation in Exeter on 8th June 2012 was a good reflection point, we had completed the evaluations and could focus on what we want to accomplish/change from our results. It was also a good time for us to reflect on how we felt the audit had gone; what we did well and what we could improve upon. It was also beneficial to see how other universities had carried out the audit, and the different methodologies that were used.
• Report

The report is a culmination of the information we have learnt from completing this audit. We also hope to use this as a base to open discussions with the civil engineering school on improving the employability of the university of Birmingham civil engineering students and possibly students in other STEM subjects.

• Changes and additions

As of yet we have not made any changes or additions to the degree programme. We hope to work with the engineering department to rectify this. We are hopeful that we will not be met with much resistance and will have a positive influence on the course as a result of the audit.

Due to the time constraint, it has not been able to finalise any changes or additions that will be implemented as a result of the audit. However, the result of this audit will feed into the module review and programme review to be undertaken in the school. The result of these review and changes resulting from it will be fed into future audits. It is hoped that we shall have a standing team of students for the audit so that experience and continuity can be maintained. Future audits could include the involvement of the employers and the industrial advisory board. One very likely change to the curriculum is the introduction of external lecturers on subjects like commercial awareness.
SUPPORT

University of Exeter organized two Employability Audit PTA meetings for the university’s that were currently completing audits (PTA meeting at the University of Exeter) and university’s that had successfully applied for budgets to complete their own audits (PTA meeting at the University of Birmingham) and HE STEM employability audit videos and resources online.

UNIVERSITY OF BIRMINGHAM EMPLOYABILITY AUDIT PTA MEETING

The first PTA meeting was an extremely useful meeting and allowed all the attending university’s to listen to and learn from the experience of the University of Exeter and engage them with direct questions. There PowerPoint presentation (which some students missed due to other commitments and then caught up on using DropBox) was full of information and gave a rough starting point for the other universities. It gave us a chance to complete the audit with our own degree of freedom whilst still knowing the aims and objectives of the HE STEM Employability Audit. Both Barrie and Chloe were very good sources of information, we were able to ask plenty of questions and they were also available for emails.

UNIVERSITY OF EXETER EMPLOYABILITY AUDIT PTA MEETING

The second PTA meeting, which was held at the University of Exeter, was a fantastic opportunity to discuss and engage with other university’s that had completed similar employability audits such as the Universities of Bradford, Manchester, University of the West of England and others. Each of the university’s produced presentations or posters which allowed the other university’s at the meetings to see how they had completed their audits. This was a great chance for us to see how each university had differed from our audit and the University of Exeter’s audit. As a university that had not quite completed our report, it also gave us an opportunity to see what we had missed out and what still needed completing; also we could see where to do things differently to ensure we covered everything.

HE STEM EMPLOYABILITY AUDIT ONLINE RESOURCES

There is lots of information available online such as blogs and videos on the HE STEM Employability audit website. These blogs and toolkits are full of information as to how to complete an employability audit, including good starting points, the aims and objectives of the audit and other resources. This is a good resource for when we were completing the audit which allowed us to know what stage we were at and also meant that we had access to Barrie and Chloe’s knowledge without having to wait for a response.

FEEDBACK

The second PTA meeting was also an opportunity to give us some feedback, which was both positive and constructive, on our current situation and any future plans, such as:
They liked the radar graphs, it gave a good description of each degree and that it could also be used to overlap with an employer's radar graph to check the University of Birmingham is providing skills that employers want to see.

We could use a number of employers to build up a series of radar graphs with Red, Amber and Green zones to build up which employability skills they find important. The radar graphs for each degree year could then be overlapped with this 'employers radar graph' and compared.

That the audit had successfully pin-pointed the employability skills that were missing from the core modules and how we could improve the core modules.

OVERALL

The University of Exeter employability audit team provided plenty of constructive feedback and help support allowing us to complete the audit in our own way whilst still focusing on the aims and objectives of the HE STEM employability audit.
The only way to truly ensure that any changes made due to suggestions made by the audit, is to carry out a secondary audit and compare to previous results to see if any improvement has been made. Further audits and evaluations in future years can be carried out involving existing team members as well as recruiting new members. It could also be possible to recruit team members outside Civil Engineering for the major/minor programmes.

These audits can report to Staff-Student committee (SSC) and the teaching committee as well as the school committee. It may be advisable to form a standing sub-committee under the SSC that will organize and carry out the audit. With more time and better planning then it would be possible to carry out a questionnaire as originally envisaged. Furthermore, the team can raise awareness of employability issues within the student body. These activities can be disseminated and promoted in other schools within the EPS College.

Additionally it may be a good to look into involvement of employers and industrial advisory group to gain their perspective on the skills that the degree programme should be developing. It may be possible to utilise these connections to bring in guest lecturers to help with specific skills such as Commercial Awareness.

After consulting with employers it could be gauged how best to put together a colour coded radar chart with a traffic light system. The green band being the final aim for each skill to have all the results within it, rather than in red or orange, but where green lies depends on the relevance of the skill.