

HE STEM PROGRAMME

UNIVERSITY OF BIRMINGHAM EPS GRAND CHALLENGE 11 July – 5 August 2011 STUDENT PARTICIPATOR HANDBOOK

Welcome to the first EPS Grand Challenge for students of science, engineering and maths subjects at the University of Birmingham.

This handbook outlines the key information you'll need throughout Grand Challenge and the course organisers' expectations of you throughout.

Grand Challenge 2011 is funded from the HE STEM programme and supported by the following companies:

Accenture
Adcal HR
Alta Innovations
Atkins
Birmingham City Council
BT
IBM
PWC
Qinetiq
Teachfirst
University of Birmingham

You can find out more about the HE STEM programme on www.hestem.ac.uk

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1. Contact information

Your first point of contact will be your team facilitator, followed by the Grand Challenge organisers.

Role	Name	Contact
Student facilitator		
Grand Challenge 1	Jenny Illingsworth	j.s.illingsworth@bham.ac.uk 0121 414 4165
Grand Challenge 2	Sadaf Alvi	s.n.alvi@bham.ac.uk 07500 835087

You have been allocated into Team XXX and you will be working with:

Name	Contact*	Graduating:

*N.B. Contact details are only for use during Grand Challenge, in order to make it easy for you to work with your teammates. You are not permitted to use phone contact details outside of Grand Challenge unless the owner gives you permission personally.

2. Attendance

You are expected to attend every session at the University of Birmingham unless you make prior arrangement with Jenny Illingsworth and inform your team facilitator. For students graduating during Grand Challenge, you will have provided your graduation time and date so we are already aware of your absence for the relevant session(s) involved. Please make every effort to catch up with your teammates the information and project progress made during your absence.

Your first point of contact is your team facilitator and you must inform him/her of:

- Any reasons why you may not be in attendance on any day, even if you have already approved this with Jenny Illingsworth.
- If you are ill or an emergency arises which prevents you attending, and for how long you expect this to continue.
- Confirm your graduation date and time (if relevant) so your facilitator can help you arrange to catch up

You are expected also to attend on time to every session. If your team decides to take time offsite from the campus, your team facilitator will inform the Grand Challenge organisers. Otherwise you are expected to be at the university each day and complete a simple timesheet for submission to your facilitator each Friday.

If you are ill or have any other circumstance which prevents your full attendance you must inform your team facilitator AND one of the Grand Challenge organisers AT THE FIRST OPPORTUNITY. Please make every effort to inform us by 10am; voicemail and text messages are acceptable for this purpose.

2.1. Behaviour

As for any organised activity, it is expected that all participants will respect the organisation, its timetable and their colleagues. As a result, mobile phones and electronic devices should be silent and only used in the context of the activity.

Grand Challenge is about working together in teams, making the most of everyone's respective strengths. It is expected, therefore, that all participants will conduct themselves in a manner appropriate to each situation, and that you will remember that the more you put into Grand Challenge, the greater the benefit and enjoyment.

2.2. Health & Safety

You will be required at all times throughout Grand Challenge to comply with the university's health & safety regulations. Specific guidance can be found on the University's Health and Safety web pages at <http://www.hsu.bham.ac.uk/>

The paintballing activity scheduled for Wednesday 13th July will require you to dress appropriately for outside activities throughout the day: full-length trousers, sturdy boots and a waterproof outer garment would be sensible. More information on this can be found at <http://www.nationalpaintballfields.com/> and you will be required to comply with NPF's rules and regulations during the whole of this activity. It is also suggested that you apply a high factor sun cream at regular intervals during the day.

If you and/or your team choose to work offsite from the university campus at any point during Grand Challenge your facilitator must inform one of the organisers.

2.3. Bursary

You will be paid a bursary for your time spent on Grand Challenge and, thanks to the commitment to this type of programme and the generosity of the Head of EPS College, you will receive a total of £1000.

This will be paid in instalments of £100 at the end of each week: i.e. £100 on Friday 15th, Friday 22nd and Friday 29th July and Friday 5th August, followed by the final payment of £600

on Friday 12th August. You will be required to submit a timesheet to your facilitator. Exact dates may vary due to accounting times within the University of Birmingham.

If you have not attended every session without either prior arrangement or immediate notification of illness/urgent circumstances, or if you have not completed all of your submissions on time, some (or all) of your final bursary may not be paid. This will be at the discretion of the Grand Challenge organising team.

3. Grand Challenge

Your team will be given an open-ended challenge which you will address, coming up with proposals for meeting this challenge. You won't be able to fully solve the problem but you will have a unique opportunity to use your logical and scientific skills to investigate ideas and suggest possible ways forward.

The workshop sessions timetabled within Grand Challenge will provide you with some of the skills you'll need. But it's your own application of these and your existing skills and experiences, whether these have been gained in the workplace, student life, coursework or outside activities, which will help you rise to the Grand Challenge.

The objectives of Grand Challenge are:

- To provide students with employability skills which they will utilise during the activity and then go on to develop in the graduate workplace
- To inform participants about their personal nature: teamworking types, personality profiling, experiences, and then to help them identify where they would like to improve or change
- To enable participants to develop their skills and confidence, and to identify areas of future development
- To work in teams to tackle a major challenge and propose possible solutions

You can make use of the facilities across campus for your project, including the library and computing equipment.

3.1. The challenges

Two Grand Challenges are proposed by companies and you have been placed into a multidisciplinary team which will build on each others' personal and academic strengths. Two teams will address each challenge and the challenges will be presented during the session on Thursday 14th July.

The companies which are proposing the challenges will be available on campus and/or via email for support during your project. Where your timetable indicates "Lunch", lunch is provided and company and academic representatives will be available for networking, idea-sharing and help. It is strongly recommended to utilise these sessions to network across the groups and companies, to the benefit of your project work.

The multidisciplinary nature of both the challenge and your team means that you will experience some of what you will have in your working career: not everyone fully understands or appreciates the nuances of your chosen discipline. This means that you will, collectively and individually, be able to make your Grand Challenge project your own, getting out what you put into it.

3.2. Assessment and evaluation

This is the first time Grand Challenge has taken place at the University of Birmingham and, as a result, the organisers will be evaluating the activity closely.

However, as for all such activities, it is important to demonstrate that participants have also benefited from attending and, to this aim, you will be required to complete the following:

- Using the attached log book, identify your skills before, during and after Grand Challenge, updating your skills profile at every opportunity.
- Submit a reflective essay of about 1000 words, outlining:
 - Your experience throughout Grand Challenge: the skills, tools and techniques you used in order to make your contribution to your team's proposals;
 - Your profile, as identified within the professional development sessions, how you feel this reflects yourself and how you may wish to develop this in order to achieve your career aims;

This essay is to be submitted by email to Jenny Illingsworth

(j.s.illingsworth@bham.ac.uk) by 5pm on Wednesday 4th August

- Peer assessment using the attached pro-forma, adding comments as evidence. If you do not add a comment to the assessment field, it may not be possible for your peer assessment to be taken into consideration.
- Feedback to your facilitator, your experience of the programme content, presentation, timing, suggested improvements and best & worst activities. Your facilitator may to organise a meeting to gather this information.

Grand Challenge will conclude on Friday 5th August with each team presenting their ideas to a panel, comprising academic staff, the Grand Challenge team and representatives of the companies who have supported this activity. You can expect an audience of a dozen visitors plus members of the other teams.

You must present your ideas in a novel, informative manner, demonstrating the tools, techniques, information sources and methods you and your team used in making your proposals. Powerpoint (or equivalent presentation software) is not to be used but you may use prepared flipcharts, models, video, animations and any other presentation method.

Your audience will be looking at:

- Overall presentation, articulation and use of appropriate and interesting presentation aids
- Description of tools, techniques and processes used to identify ideas
- Justification of ideas into proposals
- Your planning, control and achievement of this short project
- Team profile, challenges identified and how the team overcame these

A budget of £100 is available for presentation materials for, e.g. models, etc, and your team, via your facilitator, will be required to justify your request for funding to the Grand Challenge organisers.

The members of the team deemed to perform the most highly, as judged by the panel of academic staff and company representatives, will each win an Amazon Kindle e-reader.

There may also be an individual prize awarded by one of the companies involved. No monetary alternative is available.

3.3. Equipment and location

Rooms have been booked for each team to use as they deem appropriate. As outlined above, if your team decides to work off campus, you must inform the Grand Challenge organisers in advance, in the event of a risk assessment being required.

You may find it useful to bring a laptop computer to help you with your research and information gathering, and any presentation preparation. You will be able also to use the university's computer suites and if you have login problems, especially after graduation, a guest account can be set up for you.

Other equipment, such as video recorders and cameras, may be available. Please ask Jenny Illingsworth during your project development time for more details.

If you wish to print, printer credits will be set up for you, or you can email your document to Jenny Illingsworth (j.s.illingsworth@bham.ac.uk) and we can print them for you.

4. Final comments

Your facilitator is your first point of contact throughout Grand Challenge. He/she has specific responsibilities for you but you are also expected to act in a professional manner, so that you and your team are able to complete your project work to your collective satisfaction.

You will be required to complete peer assessment and your log books, and make your submissions – whether in paper or electronically, on time.

Finally, the Grand Challenge team hopes that you and your team all enjoy this experience and feel that you will benefit from having taken part. Your feedback will be vital to the success and development of Grand Challenge for future years.