UNIVERSITY PARTICIPATION GUIDE

Delivered in partnership by Engineers Without Borders South Africa, UK and USA.
WELCOME TO OUR MOVEMENT

Thank you for taking part in this award-winning initiative that gives your students the engineering skills they need to address global issues. Through delivering the Engineering for People Design Challenge at your university, together we are creating the next generation of globally responsible engineers.

Engineers Without Borders South Africa, Engineers Without Borders UK, and Engineers Without Borders USA have come together for the first time to deliver the Engineering for People Design Challenge internationally. This international collaborative effort brings design challenges faced by real communities to engineering curriculum across South Africa, the UK, Ireland, and the USA. Through partnership, the Engineers Without Borders organisations are committed to globally conscious engineering education and projects, which unleash potential and compassion in the engineering sector. Together, we build the capacity of engineers and communities to sustainably meet their basic human needs and affect positive change for communities and the world.

This guidance document provides an outline of the programme, the requirements for participating and what support your university can expect from your Engineers Without Borders partners throughout your participation. If you have any questions please get in touch!

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The Engineering for People Design Challenge is an award winning initiative, designed to give your students the engineering skills they need to address global issues. Since it started in the UK and Ireland in 2011, the programme has reached 34,500 undergraduate students and has helped them to develop their competence towards becoming globally responsible engineers. We are excited to include your university students too!

The Engineering for People Design Challenge has been developed to ensure that the human and social impact of engineering forms a foundation for students’ learning and that they have the opportunity to develop skills crucial to operating and innovating in the complex global workplace. The programme is a project-based learning initiative, embedded in 1st and 2nd year undergraduate engineering or related curriculum.

The Engineers Without Borders organisations work with communities around the world to help provide engineering solutions to meet their basic needs. Each year, the participating Engineers Without Borders organisations collaborate with one of our community partners to develop a design brief based on engineering and design challenges faced by that community. Students are tasked to work in teams and propose a solution to a challenge presented in the programme design brief. The academic year culminates with top teams from each university gathering to showcase their ideas to industry judges in a grand final competition.

**STUDENT LEARNING OUTCOMES**

While there may be specific objectives that you develop at your university, the intended outcomes of this programme are to develop an engineering community that:

- Appreciates and prioritises designing for the people and context, to ensure appropriateness and sustainability of their ideas.
- Understands and appreciates their responsibility and the social, economic, and environmental implications of engineering decisions at a local and global level.
- Understands the importance of working across cultures and disciplines in developing solutions that overcome global challenges.

By taking part in this challenge, students will also develop vital skills, including:

- Gaining an understanding of their role in the engineering community.
- Learning to consider the consequences of design decisions at both local and global levels.
- Learning how engineering underpins everyday life.
- Learning how to place people at the heart of their designs.
- Developing their engineering skills.
- Developing skills in communication, planning and project management, effective distribution of work and collaboration.
Delivering the Engineering for People Design Challenge is simple and flexible, and can be incorporated into your institution in a way that works for you. The new, real-world design brief can be easily delivered in a first- or second-year team design module. The programme can be run in existing curriculum or launched as a new course. Your students can participate in the programme for a single term, a whole year, as an independent study, or as an intensive module, the choice is yours.

WHAT UNIVERSITIES AND STAFF CAN EXPECT

- High levels of student engagement in the module
- An opportunity to use project-based learning to improve the student education experience
- Increased ability of staff to teach about global challenges and the role of engineering in overcoming them
- Increased capacity to deliver globally relevant learning outcomes across disciplines
- Opportunities for national and international academic co-learning with other participating universities

WHAT WILL ENGINEERS WITHOUT BORDERS PROVIDE

- An annual Engineering for People Design Challenge academic workshop
- A comprehensive design brief and accompanying resources, developed in collaboration with one of our international community partners
- Access to the design brief and supporting materials for academics and students via the dedicated Engineering for People Design Challenge website: www.engineering-for-people.org
- Online guidance for students and academics running the challenge
- Delivery of an optional launch lecture or workshop at your university to inform and guide students who will be participating in the programme
- Support for students and academics from our experienced team throughout the duration of the Engineering for People Design Challenge through a managed online discussion forum
- Feedback from our expert reviewers for the top 5 teams from your institution
- A fair and transparent Grand Finals selection and judging process

Subject of 2019/20 Design Brief: Johannesburg, South Africa
To participate in the Engineering for People Design Challenge and ensure that your students will be eligible for the Grand Finals please follow these guidelines:

- Incorporate the Engineering for People Design Challenge into the course curriculum at your institution.
- Confirm your participation with your local Engineers Without Borders partner (SA, UK, USA).
- Identify a principal contact for your institution and provide details on the full university name and address, participating module and total number of undergraduates participating.
- Ensure all teams participating are enrolled in a participating undergraduate course.
- Establish the Engineering for People Design Challenge website as the primary source for students for the design brief, additional information, and guidance.
- Promote engagement with the managed online discussion forum, connecting your students with other participating students and the Engineers Without Borders partners, when information cannot be found in the design briefs or other online materials. **Please Note:** The community partner organisation cannot be contacted directly due to the large volumes of students participating.
- Select up to five student teams to submit their designs for consideration for entry into the Grand Finals by the submission deadline.

**MONITORING, EVALUATION, AND LEARNING**

We are committed to monitoring and evaluating the Engineering for People Design Challenge to ensure we are delivering a high quality education outcome that delivers a positive experience for participating students and academics. During the year we may ask you or your students to participate in feedback activities that could include online surveys, interviews, case studies or focus groups. Your participation in these activities is critical to inform how we can continue to improve the support that we offer.
HOW THE CHALLENGE WORKS

PROGRAMME LAUNCH
At the start of the academic year, each university will be registered through the Engineering for People Design Challenge website. This website will contain the design brief and all of the materials and guidance necessary for delivering the challenge to students.

GRAND FINALS ENTRY: STUDENT SUBMISSIONS
At the end of the academic year, academics at participating universities may select up to five teams to enter into the international review process and Grand Final competition, hosted by your Engineers Without Borders partner. Academics will receive an email with the submission details when the online submission portal opens, which will be forwarded onto the five teams. Selected student teams will then submit their designs for consideration in the Grand Finals competition. Each team must complete the online submission process by the submission deadline (see Grand Finals Student Guideline for details).

SUBMISSION REVIEW & GRAND FINALS INVITATION
All student submissions will be reviewed against a common set of marking criteria by a group of international expert reviewers. Each reviewer is recruited and trained by Engineers Without Borders and is independent of the organisation. The marking criteria have been developed to assess student team’s understanding and application of the social, environmental and economic aspects of their design idea, as well as their consideration for sustainability and appropriateness of the idea. Each submission is reviewed by at least two different reviewers, who will provide feedback and a mark out of 30. The average score is used to determine each team’s ranking and determine the semi-finalists, who will be invited to the Grand Finals.

GRAND FINALS
As well as being an academic exercise, the Engineering for People Design Challenge is a competition and an excellent opportunity for students to showcase their work to potential future employers and industry experts. The top ranked and exceptional teams from each participating university will be invited to attend as semi-finalists who compete with teams from other participating universities on the day of the Grand Finals. The Grand Finals is also a celebration! It’s a day to honor the best teams, to discover the diversity of ideas, to meet with peers and industry experts, and to share your experiences working toward globally conscious engineering (see Grand Finals Student Guideline for details).
THANK YOU

Thank you for signing up to participate in the Engineering for People Design Challenge this year, we’re really looking forward to working with you!

CONTACT US

If you’ve been inspired to find out more about the work of the Engineers Without Borders partners, please head to our websites or contact us!

www.engineering-for-people.org

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Engineers Without Borders South Africa is a registered Non-Profit Company (no. 2013/014531/08).

Engineers Without Borders UK is a registered charity in England and Wales (No. 1101849) and Scotland (No. SC043537) and is a company limited by guarantee (No. 4856607).

Engineers Without Borders USA is a registered 501(c)3 organization (EIN: 84-1589324).
1. Introduction

1.1 This disclaimer shall govern your use of our website and the materials on our website for the Engineering for People Design Challenge, accessible from www.engineering-for-people.org.

1.2 By using our Engineering for People Design Challenge website and the materials on our website, you accept this disclaimer in full; accordingly, if you disagree with this disclaimer or any part of this disclaimer, you must not use our resources.

1.3 Competition entry for students i.e. Terms and Conditions, signed by individual students.

1.3.1 Teams are eligible to enter the Engineering for People Design Challenge on the provision they:

- Are enrolled in a higher education course at a university participating in the Engineering for People Design Challenge.
- Have participated in the programme during the academic year and have consulted with their university supervisor and have discussed all requirements for participation.
- Have been proposed by their university’s principal contact as one of the top 5 teams/individuals. Teams/individuals understand that they are not obligated to participate in the Engineering for People Design Challenge and that academic grade will not be affected by that decision.
- Have completed the online submission form by the submission deadline.
- Have ensured their project meets all of the submission criteria as set out of the Engineering for People Design Challenge.

1.3.2 Engineers Without Borders will not accept:

- Responsibility for competition entries that are lost, mislaid, damaged or delayed in transit, regardless of cause, including, for example, as a result of postal failure, equipment failure, technical malfunction, systems, satellite, network, server, computer hardware or software failure of any kind;
- Proof of posting or transmission as proof of receipt of entry to the competition.
- The decisions of the reviewers, Engineers Without Borders and a panel of judges (acting reasonably) will be final and no correspondence or discussion will be entered into on these.
- Teams or individuals that are selected as finalists are aware they need to attend the Grand Finals in order to be eligible to win a prize.
- Where prizes are granted:
  - All prizes must be redeemed within 12 months of the Grand Finals taking place.
  - Engineers Without Borders reserves the right to substitute each of the prizes with a prize of equal or greater value.
- The prizes are not negotiable or transferable.

1.3.3 Data protection and publicity statement

- You agree that Engineers Without Borders may use your name, image and town or country of residence to announce you as a participant of the Challenge and for any other related promotional purposes.
- You further agree to participate in any reasonable publicity required by Engineers Without Borders.
- By entering the competition, you agree that any personal information provided by you with the competition entry may be held and used only by Engineers Without Borders and agents to administer the competition.

1.3.4 By completing your submission for the Engineering for People Design Challenge and to the extent you own the intellectual property of this submission, you agree:

- In consideration of the opportunity to participate throughout the competition and Grand Finals day, the knowledge gained throughout and to win prizes, you grant Engineers Without Borders a Attribution 4.0 International (CC-BY) Creative Commons license to share all intellectual property generated by you in the course of the Engineering for People Design Challenge.
• That your submission does not infringe, violate or otherwise interfere with any copyright, trademark or Intellectual rights of any other party;
• And/or that you have secured all third party permissions and releases necessary to grant the License to us and have made or will make in a timely manner all payments to any such third parties necessary to enable you to exercise the rights granted to you under these terms;
• That you will immediately give notice in writing to the Engineers Without Borders of any challenge to intellectual property rights subsisting in your submission which comes to your knowledge;
• That you acknowledge that Engineers Without Borders UK may make your work freely available on their website for as long as they do not violate the terms of the CC-BY license.

1.3.5 General
• If there is any reason to believe that there has been a breach of these terms and conditions, Engineers Without Borders may, at their sole discretion, reserve the right to exclude you from participating in the competition.
• Engineers Without Borders UK reserve the right to hold void, suspend, cancel or amend the Engineering for People Design Challenge where it becomes necessary to do so.

1.3.6 Confidentiality
• You agree to keep secure and confidential any information provided to you that is identified as being confidential, and not to disclose information without the written consent of Engineers Without Borders UK.

2. Copyright and Intellectual property

  2.1 Engineers Without Borders own and control all the intellectual property rights on the Engineering for People Design Challenge website and the material on the Engineering for People Design Challenge website; and

  2.2 All copyright and intellectual property rights in our website and the materials on our website are shared with a Attribution-ShareAlike 4.0 International (CC BY-SA 4.0) licence. Any content downloaded and adapted should attribute the original resource with the following sentence ‘This material has been adapted from resources produced as part of the Engineering for People Design Challenge by Engineers Without Borders South Africa, UK and USA’.

3. Acceptable use

  3.1 You must not:
  3.2 Use our website or materials in any way or take any action that causes, or may cause, damage to the Engineering for People Design Challenge.
  3.3 Use our website or materials in any way that is unlawful, illegal, fraudulent or harmful, or in connection with any unlawful, illegal, fraudulent or harmful purpose or activity.
  3.4 You must ensure that all the information you supply to us in relation to the Engineering for People Design Challenge is accurate, current and complete.

4. Termination

  4.1 Failure to uphold your party's responsibilities, such as payment of the participation fee where applicable, can give grounds for terminating access to the website and the materials on the website.

5. Variation

  5.1 We may revise this disclaimer from time to time.
  5.2 The revised disclaimer shall apply to the use of our resources from the time of publication of the revised disclaimer on the website.