

March, 2019

The Energy Zone was a themed zone supported by the Science & Technology Facilities Council. There were six engineers in the zone:

- Oliver Moore, who is on a graduate scheme at UKAEA//Culham Fusion Centre, in Oxfordshire.
- Lesley Colquhoun, who provides equipment to manufacturers who lay subsea power/telecommunications cables at MAATS Tech Ltd who've worked with STFC.
- Leah Morgan, the winner of the zone, who maintains the equipment used to power fusion reactors at UKAEA/Culham Fusion Centre.
- Hannah Griffin, who builds software and computer systems for scientists at Rutherford Appleton Laboratory.
- Graeme Burt, who is funded by STFC and works on particle accelerators as well as teaching at Lancaster University.
- Aleks Sokol, a Distribution Planning Technician for UK Power Networks, who work with STFC.

Key figures from the Energy Zone and the averages of the March zones

PAGE VIEWS	ENERGY ZONE	MAR '19 ZONES AVERAGE
Total zone	15,304	17,686
ASK page	882	1,348
CHAT page	1,505	1,703
VOTE page	677	979

	ENERGY ZONE	MAR '19 ZONES AVERAGE	IAE 2012-19 AVERAGE
Energy Zone Schools	6	9	11
Students logged in	365	437	401
% of students active in ASK, CHAT or VOTE	96%	93%	86%
Questions asked	438	592	586
Questions approved	150	239	225
Answers given	372	516	442
Comments	29	31	42
Votes	317	354	299
Live chats	18	19	17
Lines of live chat	7,163	7,185	5,537
Average lines per live chat	398	379	317

Popular topics

There was a big focus on physics topics within the Energy Zone, with students asking about particle acceleration, nuclear power and energy.

Students were also interested in engineering as a career, and sought educational and careers advice from the engineers. In ASK, 57% of questions were relating to careers and education.

One fifth of the questions put to the engineers in ASK were 'personal' – about their lives, experiences and opinions. These included things like "Do you have pets?", "Do you live with your parents?" and "Did anyone doubt you that you couldn't be successful in life?"



Oliver



Lesley



Leah



Hannah

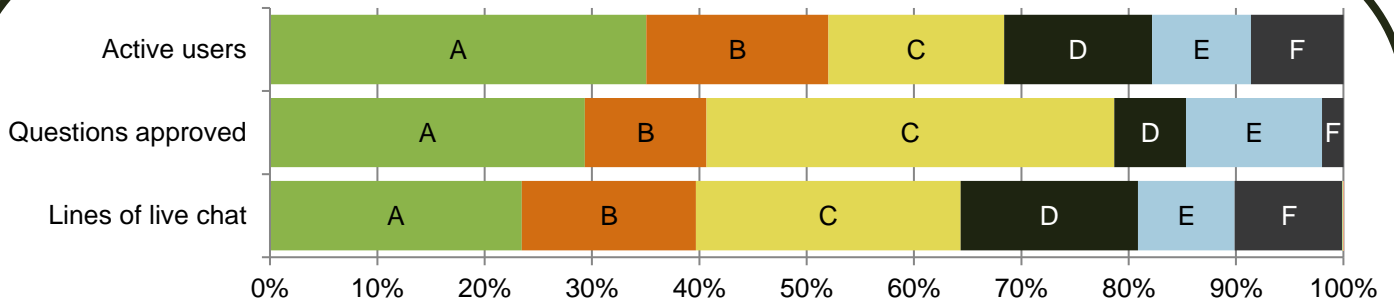


Graeme



Aleks

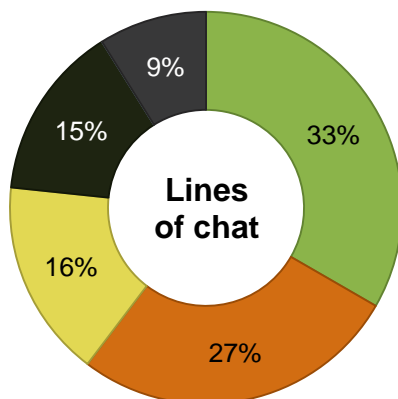
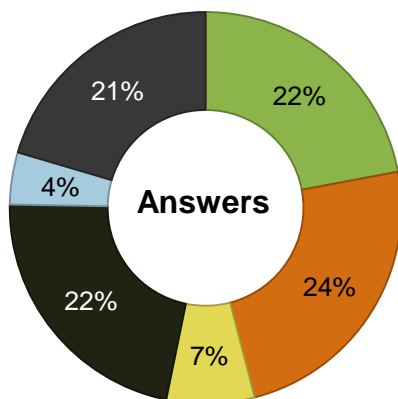
School data at a glance



School	Year/s	Classes
A Dartford Science & Technology College, Dartford	Y9	6
B Llanyrafon Primary School, Torfaen, U	Y5	2
C The Petchey Academy, London, WP	Y7	2
D Orchards Academy, Swanley, WP/U	Y9, Y10	2
E Pitteuchar East Primary School, Fife, U	P5	1
F Trinity CofE High School, Manchester, WP	Y12, Y13	2

We want to increase the participation of under-represented groups going into STEM careers. Find out what we mean by our under-served (U) and WP schools (WP), and how you can support us in working with more of these at about.imascientist.org.uk/under-served-and-wp/

Engineer activity



ENGINEER	PROFILE VIEWS	POSITION
Leah Morgan	679	Winner
Graeme Burt	470	2nd
Aleks Sokol	327	3rd
Lesley Colquhoun	440	4th
Oliver Moore	544	5th
Hannah Griffin	323	6th

Ask?

Top Keywords of questions approved in the Zone

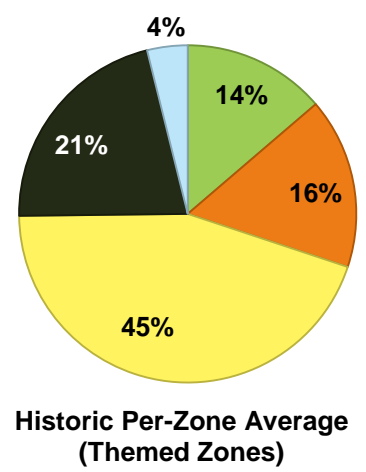
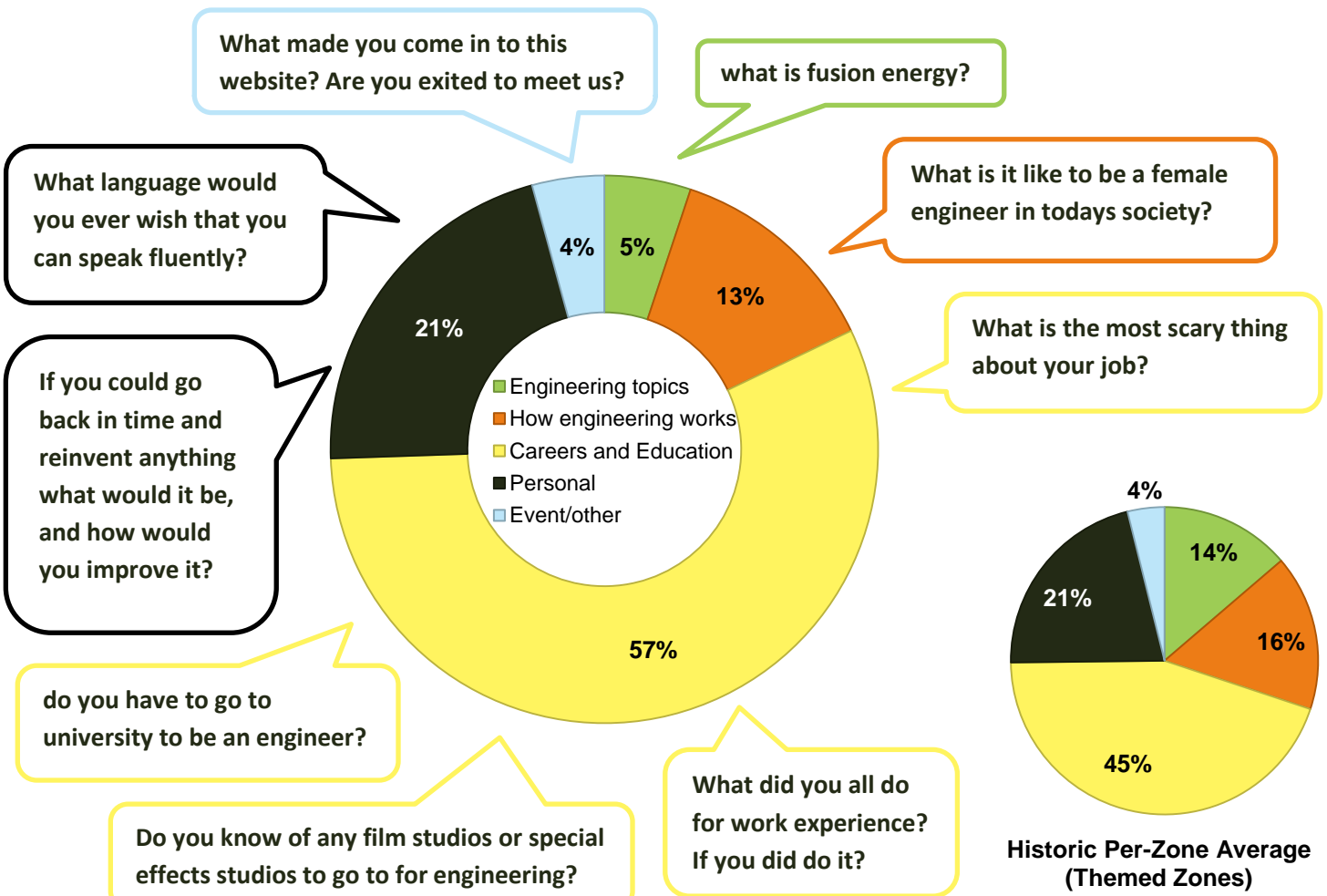
Area represents frequency of use



Being an Engineer Engineering Other

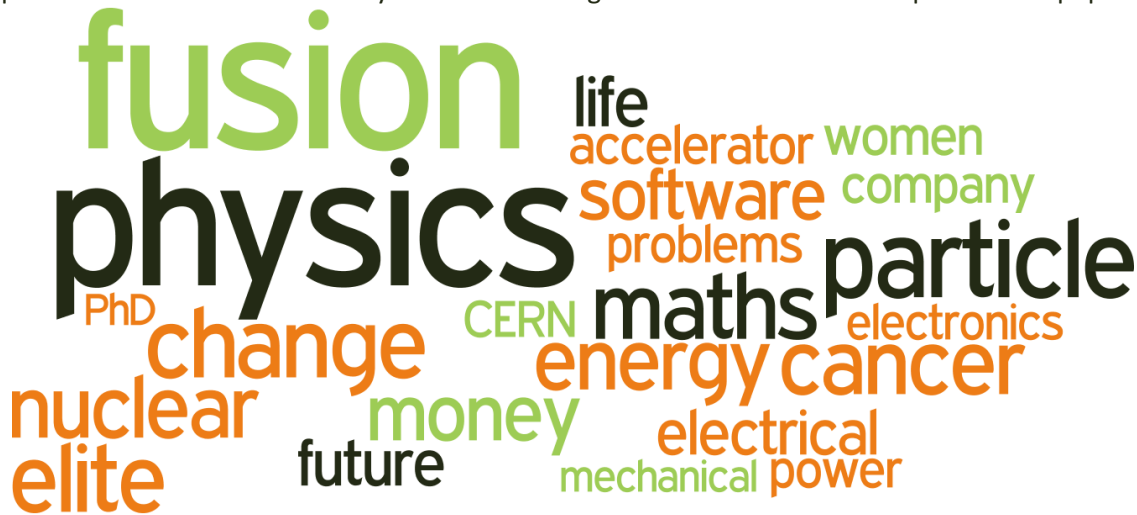
Question themes and example questions in the Zone

Find out about how we've coded the questions at about.imascientist.org.uk/what-do-students-ask-about/



Chat

Frequent words used in live chats by students and engineers. Size of the word represents its popularity



Examples of good engagement

The students often asked for the engineers' personal opinions, sharing in turn their own thoughts and experiences. One student commented that they would like to be an engineer in the future, and later shared their achievement in securing a work placement:



Question: Hey there guys, I am looking to be an engineer in the future however, I am not entirely sure what sector would best suit me. What do you all personally think is the best area of engineering to work in?

Keywords: [career](#), [engineering](#), [future](#)

Asked by [Julien](#), to [Oliver](#), [Lesley](#), [Leah](#), [Hannah](#), [Graeme](#), [Aleks](#) on 6 Mar 2019.



[Lesley Colquhoun](#) answered on 6 Mar 2019:



Well I'm a Mechanical engineer and deal with the "mechanics" of things. This is how things work and the physics behind it. With this knowledge i am able to understand why something might not be working and physical solutions to everyday operations. We do learn software and electrical during the course to give us the tools to identify what can be achieved but do not have the full toolkit required.

Electrical engineering is fascinating to me, but i personally just cannot seem to get my head around invisible things!

I would advise you to look at lots of different courses and see what interests you most! the world is becoming more and more automated and i keep seeing more courses for "mechatronic" type fields which mix the mechanics and the control side into one.

Have you a specific interest in life? engineering can be applied to everything from animals, sports, cars, planes, space!



Oliver



Lesley



Leah



Hannah



Graeme



Aleks



Graeme Burt answered on 6 Mar 2019: last edited 10 Mar 2019 5:34 pm



They are all good. Try to get some work experience or try some of them and see what you like best. You can learn a lot of mechanical engineering by fixing cars, electronics by getting a raspberry pi or Auduino, or building radios, chemistry and nuclear is a little harder to do at home but you get work experince.
I love electronic and electrical engineering. Imagine what the future looks like, got it, now did anything you imagine not involve electronic and electric engineering?
Electronic and electrical engineering is basically engineering the future.



Julien commented on 6 Mar 2019:



Well I have managed to get a work placement in July at a company that goes by the name of BAM. It's all to do with engineering which was why I chose to apply for it really. In fact they offered to give me an experiance that involved every type of engineering that they offer which was cool. Anyways, thanks for your responses guys. I enjoyed the live chat this morning. Cya



Graeme commented on 7 Mar 2019:



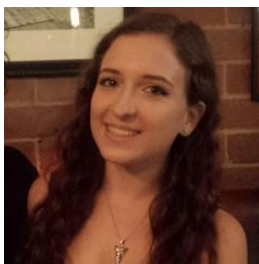
Thats great news. If you still don't know after that many Universities do general engineering where you can do them all for one year then specialise in the 2nd year



Lesley commented on 7 Mar 2019:



Ah amazing! that sounds perfect! you'll be able to see lots of different types and decide what you like best.
Good Luck! you'll ace it!



Engineer winner: Leah Morgan

Leah's plans for the prize money: *"use the money to build and design STEAM crafts and experiments, to take into children's wards. I think the children who are stuck in hospital while they are ill would really enjoy it!"*

Read Leah's [thank you message](#).

Student winner: Julien

Julien from Trinity CofE High School was nominated by engineers for "really interesting questions and enthusiasm". They demonstrated this in their question in ASK, as above.

As student winner, Julien will receive a gift voucher and a certificate.

Feedback

We're still collecting feedback from teachers, students and engineers but here are a few of the comments made about March's *I'm an Engineer* activity...

it was great to be able to reach out to students from all parts of UK... We 'went' to them... hopefully easier for teachers as they didn't have to come to us – **Engineer**

I've learned that engineering is in quite a lot of jobs and you need science for engineering – **Student**

You guys have really encouraged me to push forward with my career and to carry on dreaming big! – **Leah, Energy Zone winner**

[I have learnt] there are many different types of engineering and you can make a big difference by doing something you love. you can help people such as aspiring children and people who used to be in the army which is incredible as it is a job many people think does not help others. – **Student**

Students, I really enjoyed your enthusiasm in our live chat sessions! Your questions helped me find new ways to explain my work and taught me something new when I had to search for answers. Your creativity and interest in “why” things work will help you succeed in your education and future careers. – **Brian, Space Zone winner**

I have learnt that there are lots of different jobs for engineering and not just fixing engines and getting all dirty by going underneath cars! Also I like the sound of working like an engineer and have heard you earn quite a lot of money! I think it would be fun and I like the sound of Shruti's job! :) :) :) :) :) – **Student**

It's been great. I've really enjoyed the variety of questions from students. I've been impressed about how much some students have known! – **Shruti, Milligram Zone winner**