October 2022

Cover Photo by
Thomas Angus (Imperial College London)

Vol.1

The Freshers' Issue

Top tips to succeed in your first year of chemical engineering

What's new?

Find out what kind of events will be happening in the first term

PIPELINE

IMPERIAL CHEM ENG SOCIETY

TABLE OF CONTENTS

EDITOR'S NOTE

HELLO FRESHERS!

Congrats on being accepted into one of the most prestigious Chemical Engineering courses in the world!

I'm Colleen, the Pipeline Editor, and Pipeline is Chemical Engineering Society's termly magazine. This 1st issue is the Freshers' Issue and is **specially curated for you guys :)**

Over the year, I'll be curating more exciting issues so do keep an eye on Pipeline! Curating this issue has brought back a lot of memories of my own 1st year experience and honestly, this is the best time to go out and have fun (1st year makes up 7.5% of your total grade but do double check your programme specifications)!

I encourage you to treat your university years as a platform for **your own personal trial and error**.

Give yourself permission to explore new hobbies, interests, meet new people and visit new places! Even if you face challenges or struggles (be it in academics, relationships, or other areas of life), you're still in **university which is a much bigger safety net** as compared to your future workplace or adult life.

I wish you all the best in your first year and hope this Freshers' Issue can help you guys settle in. Cheers!

Colleen Handriani Wijaya

Head of DEPARTMENT

Hello! I am delighted to welcome you to the Department! **You have certainly made the right choice by selecting us!**

You would be delighted to know that we have received positive feedback in the annual National Student Survey (NSS) this year: the final-year students reported 89.7% overall satisfaction with the course and 90% satisfaction with the teaching.

The NSS results reflect the importance that we attach to the student experience. We make sure that you're well looked after so that you can have **the opportunity to excel and realise your massive potential**, but that you also have the time to lead a healthy and balanced life, make friends, have fun, and make the most of your time in London.

I would like your time with us to be as happy as the four memorable years I spent here as an undergraduate in Chem Eng (many years ago!). As Head of Department, this is my highest priority, and I will be working with the Academic Reps, ChemEngSoc, and Departmental staff to make it happen.

I wish you the very best of luck with your first year, and I look forward to meeting you soon!

Omar Matar

FIRST YEAR Chair

Hi fellow ChemEngers, I'm Dr. Colin Hale (Colin is fine) your First Year Chair. As you'll soon realize I'm one of the Departmental staff with several different hats. Over the coming year you'll get to see quite a bit of me; whether it's during my start of year introduction, for the Process Analysis lectures that I teach, for 1st year Mastery or just for a quick wave as you pass by the pilot plant control room.

In my role as First Year Chair I'll be working together with you throughout the coming year to ensure that you can settle in as quickly and easily as possible and realize your full potential. I'm sure that you'll soon figure out that **you're actually becoming part of a big Chemical Engineering family.**

Of course, things may be different from what you've been used to until now and so I'm one of the people here to help smooth that transition for you.

Firstly, I wanted to take the opportunity to congratulate you on gaining your place in Chemical Engineering; especially since recent times have been so unusual by any standards.

During your time within the Department you will see that it actually consists of a very diverse group of people from quite literally any country and background that you can imagine. This makes it an exciting place to be and provides you with lots of future opportunities. **Some of the people that you meet during the four years of your course will probably go on to be lifetime friends** so make sure that you take full advantage of your time here. As a former Imperial graduate myself I know this to be true.

One of the reasons that this happens so often in Chemical Engineering is that a key part of the work you do here is within groups. This means you get to interact with lots of people in different projects and on different aspects of the course. That's a really transferable skill for later and sets you up for being able to work in any team, anywhere and in whatever discipline you decide to follow later.

Of course if you're already thinking about what you can do with your Chemical Engineering degree after you've graduated, it's important to remember that **the discipline is currently undergoing a golden age.** There are currently lots of global challenges where Chemical Engineers can make a significant difference; whether it's re-thinking existing processes to ensure they are more sustainable, developing new processes to tackle climate change or mass producing vaccines. When I look at our existing graduates they've pretty much gone into any field that you can imagine.

One of the key advantages of doing the Chemical Engineering degree is that it gives you the skill sets and the confidence to be able to do exactly that. **Amongst our Alumni we've got graduates that have gone into mainstream Chemical Engineering, whilst others have gone into finance or accounting or set up their own businesses and been extremely successful.** In four years you could be following in these footsteps or making your own path to success so make sure you take advantage of your time within the Department and at Imperial; not just in terms of the course itself but also in terms of the extra-curricular activities that you do. It's an incredibly important aspect of your time at University since its one of the few times you get so many opportunities. The ChemEngSoc team are here to help give you many of those opportunities – so look out for their messages over the coming weeks.

So, what's the recipe for success? As you start to go through the course you'll see that there's a lot of stuff to cover in a relatively short period of time and so one of the key secrets for success is to aim to be consistent throughout the year, working towards doing the problem sheets and brushing up on the lecture material as you go to ensure that you understand it.

If you work consistently throughout the year you will find that it is also easier to fit in those extra-curricular activities and take advantage of being in a cosmopolitan capital city. After all, there are lots of things to do in and around London in your downtime.
Of course it takes a while to get the balance right, so a good way to ensure that you keep up a consistent pace while taking advantage of the extra-curricular opportunities is to work together with your classmates. If you study together you can help to motivate each other to work towards solving different problems. Also, if you get stuck on things as you go through then **you can always ask your peers for help** and it's likely that someone in your group will have a better understanding of that particular aspect than you do.

So, onto the second secret for success - **never be afraid to ask questions**, even to your seniors or the people lecturing you, like myself. People often tend to be quite shy to ask questions because they are slightly afraid that they may be asking something silly. However, **one of the key things to remember is that generally the bit that you aren't sure about is probably the part that nearly all of your colleagues are also unsure about as well.** You are actually helping them by asking your question.
As you go through the course, sometimes you will go along to tutorials in a specific subject and you may find that you are struggling to do a particular problem whereas someone else within your group seems to have finished the problem sheet and is now a whole problem sheet ahead of you! Of course, this can be quite disheartening, but the key thing is to remember that actually when you go to the tutorial for a different subject, it's you that's done the entire problem sheet and now all the other guys are looking at you thinking, "that's the person that has done all the problems."

Never forget, you've all got slightly different skills and you can apply them in different ways. Part of the big advantage of group work and working together is being able to use all of those available skills. You can apply the things that you're good at and learn to develop some of the skills that you're not so good at from your peers and they can do similar things from you.

Occasionally throughout your time here, there may be other situations where you're struggling a bit. **Remember that you can always come to me or others within the Department (such as our Student Wellbeing Advisor – Faith Ross) to ask for help.** We're here to support you; whether it's from an academic performance point of view or from a more personal point of view. You'll see that you'll also be assigned personal tutors who are there to help you with some of those non course related issues. Always remember that if you have a problem, however personal or apparently trivial you think it may be, there is someone around to ask. After all, that's what our other years do. Wishing you all lots of success. I look forward to meeting you all properly and working together with you in the years ahead.

ChemEngSoc President

Paul Fennell

Hello everyone, and welcome to Imperial! I look forward to meeting new arrivals at the welcome dinner, which is always a great fun event, and you will get to hear an entirely new speech which I don't repeat from year to year, and don't listen to the members of the committee if they say I don't – they are liars 😊.

The world is currently undergoing significant turmoil (I REALLY WANT TO WRITE A WELCOME THAT NO LONGER SAYS THIS), but I hope that Imperial can remain a small oasis of calm in a maelstrom of national and international madness. You are united here in a common goal (and I paraphrase the Imperial College motto… leaving out any contentious bits) which is **to become enabled to, and to subsequently use science and engineering to benefit mankind** – I hope that you will all find a way to do this both at and after Imperial. Enough banging on – see you at the dinner.

ChemEng

ChemEngSoc Chair,
Paulina Gordina

Hello to all new faces reading Pipeline for the first time and the old ones who decided to pick up the freshers copy!

I am Paulina, your **Chemical Engineering Society (ChemEngSoc for short) Chair** for this academic year, and I am going into my fourth and final year of study!
First of all, welcome to the university and the society. Over the next four years I hope you come to love the people of this department, the course and even the ChemEng buildings as much as I do.

It is ChemEngSoc's job to make sure you have a blast of a time and have as many opportunities as we can feasibly create for you to meet people, explore your interests and figure out what career paths are open to you (hint: way too many).

We have lots in store, so make sure to flip through these pages and check the calendar section to see what we have planned for the next couple of months! You will also find a section with all of this years committee members, so you know all the extra friendly faces in the department!

Chair

Lastly, to end this brief introduction, in these first weeks it really is sink or swim. It is so easy to get in your head and stop yourself from making connections and exploring (legal) activities outside of your comfort zone.

Never forget, everyone is in the same boat. It's a new atmosphere for all, new surroundings and new faces, so try to tune out the voice of self-analysis you might have in your head (I know I do) and go out there and do things. It is always better to try and fail than not try at all. And four years feels long, but it will be gone in an instant.

So, go to that social event even if you don't know anyone else who is going, cut your bangs, try out that new sport! As long as you are healthy, and have your keys and wallet safe, you have nothing to lose!

And of course, gotta do the plug, please join ChemEngSoc events :)

P.S. If you have any ideas, suggestions or want to get involved more deeply in the society, make sure to reach out to any committee member or just email us at chemengsoc@ic.ac.uk!

MEET THE COMMITTEE!

Paulina Gordina
Chair

Radhika Nyayadhish
Vice Chair

Defne Demirdesen
Secretary

Hana Khatib
Treasurer

Juproop Lalli
1st Year Coordinator

Bide (Peter) Chen
Industrial Relations Officer

Jonathan W Low
Industrial Relations Officer

Khan Kanjanabult
Comms. Officer

MEET THE COMMITTEE!

Khushali Gosain
Events Officer

Niam Shah
Events Officer

Begona Parias Moreno de los Rios
Sports Officer

David Ke
Regalia Officer

Xuanyong Tay
Tour Officer

Bastiaan Geurtz
Alumni Officer

MEET THE COMMITTEE!

Colleen H. Wijaya
Pipeline Editor

Paul Fennell
President

Chris Tighe
Vice President

Zhong Qi Zhuang & Elton Lam
Academic Dep Reps

John Huang
Wellbeing Dep Rep

Note: Academic & Wellbeing Departmental Representitatives are part of the department not ChemEngSoc but they're equally as important!

BY: JUPROOP SINGH LALLI

The fresher's guide to Imperial ChemEng:

Tips and Tricks to ensure you make the most of your year

So, you're going into your first year at university, studying Chemical Engineering at one of the best institutions in the world with Imperial. Congratulations on getting here! All your hard work has paid off. You must be feeling a multitude of emotions; pride, anxiety, excitement, but most prominently curiosity. How will I fit in? What things can I get involved in? But most importantly, how do I have a successful, enjoyable, and fun first year? Fret not, as through the course of this article, we will offer up all the best tips to ensure that you make the most of your first year as an Imperial ChemEng'er. We can't guarantee that all the tips here will work for everyone, as not every student is the same, but hopefully most of our tips will be a guiding light at some point in your first year, which you'll be glad to have followed.

1.University is all partying... right?

Most students come into Imperial with either one of the following mindsets – that first year will be a breeze and they can have all the fun they want without worrying about the consequences, or that they must focus entirely on working towards achieving that first-class honors and get their name on the Dean's list, no excuses. One thing you will realise is that neither mindset is correct, and that the best students exist somewhere along the spectrum of those two ways of thinking. Your mental and physical health is vitally important, as only when you are in the best state of mind and body can you offer your best to this degree. This is not easy by any account; allow yourself to indulge in a world outside of academics, whether that be going on a student night out, getting involved with a club or society (which imperial has the most of out any university in the country) but also know when to go back to the library. You will have a lot of independence as a university student, but you will also have to pick up new things: doing your laundry, cooking, and commuting more often. Thus, finding a balance of all these things with those that you want to do is important. Only you can work out this balance for yourself, and it differs as you go down the line, with fresher's and the new year being a very sociable time, whilst the run up to the Christmas, Spring and Summer exams will be more a study-orientated period. But do remember, finding balance between work and life is key!

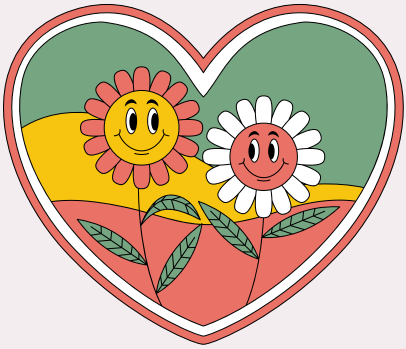
2.Planning is cool- trust me...

University can often move at a hundred miles an hour, so staying organized is important. It can seem like a tedious ask in the first couple of weeks, since coming to university from high school, college or a gap year can seem to make all thoughts of structured learning evaporate. It requires a lot of independence, and you are still adjusting to the freedom of not having to follow a set timetable. You may enjoy the freedom at first, but you must appreciate that it comes with the responsibility to ensure you don't fall too far behind in your academic tasks, such as attending personal tutorials and completing assignments. To condense this idea, plan to complete a couple of things each day, even if it's just as simple as watching lectures and attempting the problem sheets. You will be in a good position to have free time to go to events or explore new hobbies and interests. From here you can think more long term; the Teams or Outlook calendar is a great tool to schedule events and assignment deadlines and add reminders to avoid last minute panics. You will feel relaxed knowing that you have a plan in place; however, one thing to make sure you accommodate within your planning is completing problem sheets and attending academic tutorials - the misconception is that these being non-compulsory means you don't have to do these, but this is the wrong approach! This helps you practice the concepts and get in that spaced repetition, which will be invaluable for saving revision time for the final exams. It also creates deepened neural networks which will ensure that you understand the content better in the first place and remember it longer!

3.Procrastination is not your friend- quite the opposite in fact

Planning is good and all, but perhaps what is more important is acting on your plan. As I mentioned earlier, being a fresher newly out of the high school education structure, it can be tempting to spend time doing “nothing”, like scrolling through social media or hanging out with your new mates but pushing things to a later time will come back to bite you. It is no secret that all university students are behind on work - you’ll be hard pressed to find someone who is at least level with everything that you have been taught (let alone ahead) - and that is part and parcel of being a university student, but what you must not do is get into thinking that you can leave work as you are already behind. Granted, procrastination can’t be fixed by just telling yourself to stop procrastinating, as it often manifests from fatigue or a loss of motivation that causes your mind to wonder, so the best thing to do is put your distractions to one side and make a start. Even if you mentally know you are behind, and you already have mountains of work to get through, just picking up that problem sheet and trying the questions or watching that morning’s lecture that you missed will be a great step to ensure you are not falling further behind, but rather making progress. Trust me, not having to worry about spending your holidays catching up whilst all your friends are out enjoying themselves is an incomparable feeling and catching up on five problem sheets/lectures at the end of term is much better than having fifty to do, so don’t give up! Get started and things will get better.

4.Look to make friends- you are in this for the long run!



Being new to imperial can be daunting – it's a new place, most probably your first experience of university, and for some of you the first time living by yourself in a new city. The one thing that can be guaranteed is that the imperial community is very vibrant and welcoming, both inside and outside ChemEng, there is always the opportunity to make friends. Your friends will be an invaluable support network and you will share amazing experiences with them, but you need to put yourself out there to find them first! So, take this as your sign to attend lectures and talk with your fellow course mates, attend the amazing ChemEngSoc events, go out and sign up for those sports and community motives that interest you, and not being afraid to talk to others! Most likely, other first years will be in the same position as you, so reaching out will benefit both of you to make connections. Some useful icebreakers are discussing the colourful British weather, introducing yourself and why you are doing chemeng at the welcome dinner, or just discussing the lecture you just attended with those you were sitting next to- and it doesn't just have to be fellow first years that you can become friends with; the beauty of the community is that you can find things in common with those in the years above you too by attending events or sports sessions for things you are passionate about! But this can be done passively too - whether you are in the library working on understanding the last lecture you watched or even cooking your dinner late at night in your hall's kitchen, you will find others like yourself, so these are great opportunities to meet new people.

If you ever feel like you are confused or lost with something in your first year, you can always come back to this article since all the pipeline issues are posted online on the ChemEngSoc website, and if you are struggling with mental health concerns, imposter syndrome or anything else not mentioned here, Faith Ross(the ChemEng welfare officer) would be a great contact point- I'm sure she'd be able to help you, if not point you in the right direction. If you are interested in finding out more information about ChemEng in general, exploring the best tips and tricks for students from university to careers and everything in between, do considering following me on @chemengweekly across YouTube, Instagram, Twitter, and other social media platforms- I'd be more than happy to talk and help you out! And apart from that, do keep an eye on what's pumping out of the Pipeline, and I wish you all the best for your first year of Chemical Engineering!

Join the Class of 2026 Facebook Group!

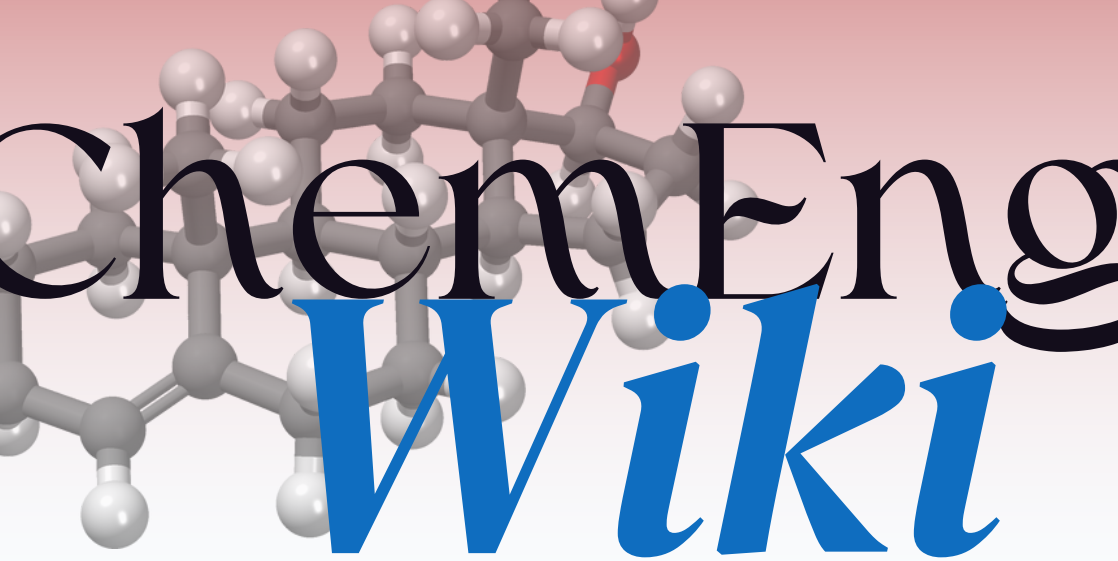
Academic representative

DAVID, CLASS OF 2025

Adapting to Imperial might look daunting and insurmountable, but our department has dedicated teaching and support structures aimed at improving your experience in higher education. One such structure is the representation network, a direct line for student-staff communication run by volunteer representatives (reps). It forms a live feedback mechanism where the students' voices – recommendations, inquiries, or requests – are collectively conveyed to the teaching staff.

Useful information and clarifications from staff responses are then disseminated to the whole cohort. Each year group elects two academic reps and one wellbeing rep who liaise with staff in regular meetings. When I volunteered to be an academic rep, I didn't realize how much of an impact my involvement could have: Throughout the year I found myself resolving and communicating inquiries around exam provision, additional teaching support, deadline conflicts and other actions that must be addressed promptly. This was made possible through the department's support and the training provided by the departmental reps and the union.

In addition to working together, reps often directly cooperate with other key personnel. As a first-year academic rep, I always had direct communication with the First Year Chairman Dr Colin Hale, who addressed many student inquiries and recommendations. The wellbeing rep closely works with the departmental wellbeing adviser Faith Ross, who is a key figure in supporting the student experience. The academic representation network also collaborates with StudentShapers, a learning and teaching scheme which empowers students to shape the curriculum with staff.
Overall, it's a rewarding experience to work with other reps and teaching staff, and I would recommend anyone interested to try it out. There are a lot of organizational skills to gain from working in the network, plus you get free food and vouchers!



ChemEng Wiki

BY DAVID AND LUC PAOLI

With how fast-paced our lectures can be, it's often difficult to write accurate, concise, and complete notes, and students often need to compare and share them. To support note-sharing, we developed ChemEng Wiki, **a crowd-contributed collection of student-curated notes. For over two years**, chemical engineering students have used the wiki to:

1-**Reinforce knowledge** while working on problem sheets

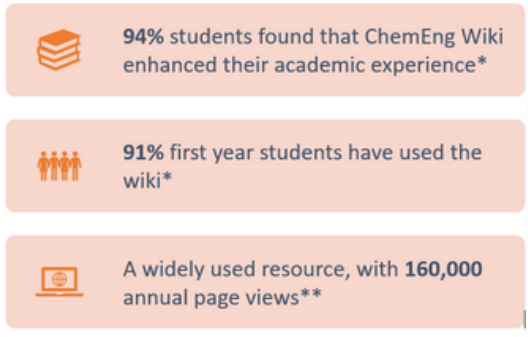
2-**Consolidate and catch up** on lecture content

3-**Recall and revise** key concepts ahead of exams

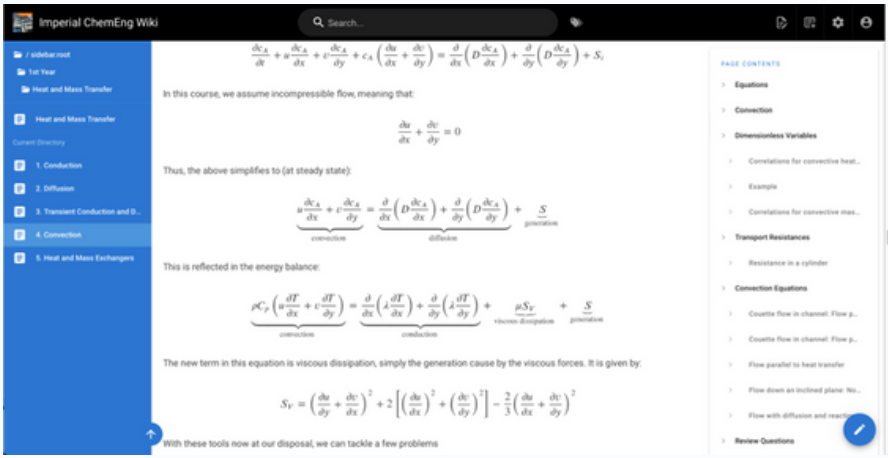
4-**Confirm and summarize** personal notes

5-**Prepare for and learn ahead** of upcoming lectures

ChemEng Wiki contains **summarized notes for all first-year modules,** some of which contain additional derivations and information. Head over to chemengwiki.com, log in, and try it out!



** Data from surveys run summer 2022*
*** Data from Google Analytics for academic year 2021-2022*



"Because the wiki is student-led, I think it is a good stand-alone resource as the student representation of the courses and learn from others how to take in the material better. Also, **I think because of how concise it is, it is better than googling a particular topic and [ending] up finding a bunch of irrelevant information.** In a way, it is very *Imperial-like*."

TERM 1
EVENTS

1-4pm, Monday 7th October
ChemEngSoc Buddies Lunch

12-1pm, Tuesday 11th October
bp @ Chem Eng

12-7 pm, Thursday 13th October
Shell Careers Day

12-1.30 pm, Monday 17th October
Exxon Careers Day

6-7:30 pm, Tuesday 18 October
Chartwell Case Study Workshop

12-1pm Thursday 20th October
P&G Careers Day

12-1pm Tuesday 1st November
Bechtel Presentation

Tuesday 29th November
Recycling Technology-Sustainability Week

Add these to your calendar!

BOWLING

Limited tickets available

DEPARTMENT TOURS

4TH October 2022, 6pm-(every 20 minutes)

PUB QUIZ

Prizes to be won

MOVIE NIGHT

To find out more, sign up

PUB CRAWL

6th October
18:30-23:00 South Kensington/Fulham

Save some £££!

Note: This is NOT sponsored

Too Good To Go

The **"Too Good To Go"** App connects you to surplus food from restaurants, bakeries, and other food businesses.
They offer discounted "surprise bags" filled with leftover food and can be collected at specific time slots.

UNiDAYS

StudentBeans

UniDays and **StudentBeans** are unarguably the best places to go for student discounts.
Sign up using your student email and you'll have access to discounts on Food & Drink, Fashion, Tech & Mobile, Health & Beauty, Entertainment and many more!

#SocialMedia

A Meme to kick off your 1st year!

Stay updated with ChemEngSoc! Follow us on these social media channels:

@icchemengsoc

Imperial College Chemical Engineering Society

icchemengsoc

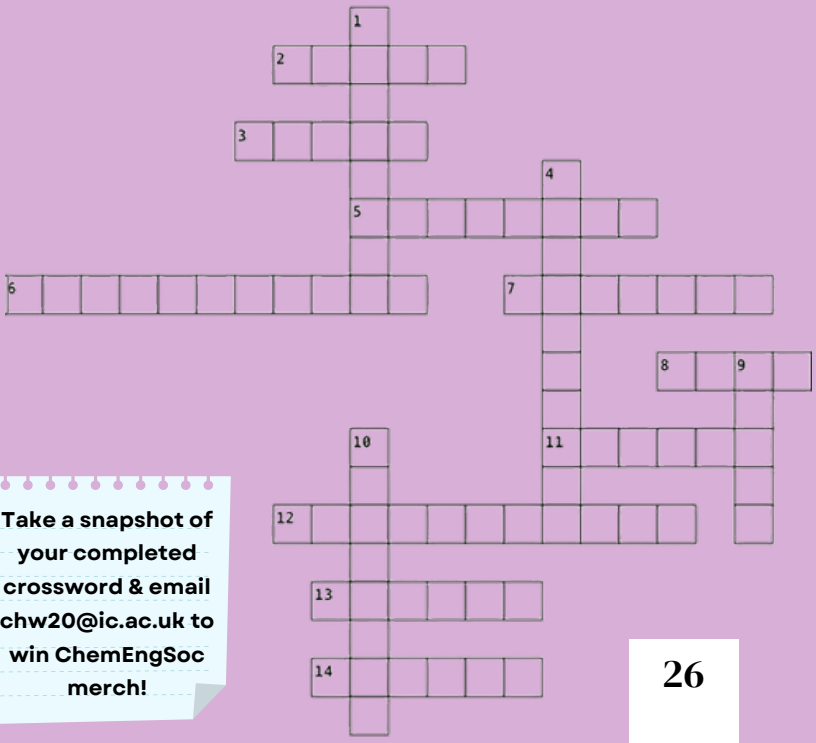
Crossword Puzzle

Welcome to **(5)** dear fresher, the school of your dreams. For the next four years you'll be working with amazing minds and half the time, assuming **(12)**. You'll also learn a lot from **(6)**'s wave equation, (not his cat) to coding with **(14)**.

The department of **(10)** engineering is innovative and exciting with lots of lovely people like the head of department, **(8)**, the wellbeing officer, **(2)** and Colin, whose favourite place to be is the **(4)**. We also house the Bone building and **(7)** Hill building.

Whether you're as close as Prince's Gardens or as far as North **(9)**, we're looking forward to seeing you in person this year. Let's grab a bite to eat at everyone's favourite Japanese food stall, **(13)** or have a picnic at **(3)**'s Lawn. We could even catch a show at the Royal **(11)** Hall!

Adjusting to university won't be easy. Give yourself time and be patient with yourself. Don't be scared to make friends or speak up. All of us here at **(1)** believe in you and we hope you have an amazing first year!



Take a snapshot of your completed crossword & email chw20@ic.ac.uk to win ChemEngSoc merch!

Join Us Pipeline

In addition to the writers, this Pipeline Issue was brought to you by...

Ari Luna Rueda
Graphics & Design

Eylul Akgok
Editing & Proofreading

Oluwakemi Akinnola
Crossword & Sudoku

Bhargavi Bavaharan
Editing & Proofreading

WHY JOIN US?

- **Flexible commitment** (ad-hoc or termly)
- Develop **teamwork skills**
- **Interview academic staffs!**

You can **contribute in many ways**! We're open to **photographers**, graphic designer, academic writers & interviewers, lifestyle writers and other roles!
Interested? Email colleen at chw20@ic.ac.uk !

Get your Digital Copy here!

Pipeline AY 2022/23

Imperial College Chemical Engineering Society

@icchemengsoc

icchemengsoc

IMPERIAL CHEM ENG SOCIETY