

Copenhagen Scholars Participant Comments Fall 2018

Harsh Bhundiya '20 – Mechanical Engineering Caltech / Mechanical Engineering DTU

Study abroad in Denmark has surpassed all my expectations. Having never traveled to Europe, I chose to study abroad in Denmark because it is conveniently located to allow travel to both Eastern and Western Europe. In addition, I wanted to experience a culture I was not at all familiar with. Not only have I been able to make great friendships during the last two months, but I've also been able to immerse myself into Danish culture, all while exploring Denmark and the surrounding countries.

The Danes are very welcoming people. At DTU, you will be living in a student dormitory called "Kampsax" with your own room and bathroom. You'll share a communal kitchen with 10-15 Danes, all of whom speak English and are very friendly. I've really gotten close with my kitchen-mates, and I've participated in many activities with them. Whenever there is an event or party on campus, they never fail to invite me. I also enjoy cooking with them. My kitchen-mates were quite surprised when I first told them I was vegetarian, but in two weeks or so, they decided to make vegetarian food with me every Tuesday. One week I even made an Indian dish called Pav Bhaji for my entire kitchen. The dish was a hit, and now we make Indian food quite often.

In addition to making friendships with Danes, I've been able to meet many exchange students from all over the world. When you first arrive at DTU, you will participate in "Introduction Week", a week-long set of activities made specifically for exchange students. You will be assigned a "buddy", usually an older DTU student, and a "buddy group" made up of exchange students just like yourself. This week is filled with fun group activities, games, and even an "Amazing Race" across Copenhagen. You feel welcomed, and it's quite nice making a group of friends before classes start. I still hang out with my buddy group often, and we organize many activities in Copenhagen as well as weekend trips to other countries. Next month, for instance, I will be travelling to Iceland with some of my French and Australian buddies!

In terms of academics, DTU is the most prestigious technical university in Denmark, so whichever classes you end up picking, you will definitely have a great time. As a Mechanical Engineering major also minoring in Aerospace, DTU was a perfect fit for me because of the many aerospace classes offered in the DTU Space Institute. Two of my four classes are in this department, and it is quite fun learning about Denmark's space program and the European Space Agency. The lectures at DTU are organized as 4-hour blocks once or twice a week depending on the class. Four-hour lectures may seem daunting, but most blocks are organized as 2 hours of lecture and 2 hours of exercises/group work. In addition, most classes do not have weekly assignments but instead have group work due once a month, which is a refreshing change from

Caltech's weekly problem sets. The Danes also seem to spend less time going over theory and emphasize practical exercises and group work.

All in all, living in Denmark for the past two months has been wonderful. Copenhagen is an amazing city with so many great attractions like Nyhavn, Tivoli, and Reffen. So far, I have also travelled to Sweden and Germany, and plan on visiting Bulgaria, Greece, Turkey, Iceland, Italy, and Belgium. Studying abroad allows you to grow in so many ways, and I definitely recommend it to anyone with the slightest sense of adventure.

Elyzabeth Camacho '19 - Physics, Caltech/Department of Physics and Nanotechnology, DTU

Studying abroad at DTU has been an incredible experience. Being immersed in a different culture away from almost everyone I knew has taught me independence and given me the opportunity to build invaluable life skills. But perhaps more importantly, studying abroad has broadened my perspective of the world in terms of compassion, understanding and appreciation.

I choose to study abroad for two reasons. First, I've always wanted to explore the rest of the world and second, I wanted to experience something different from Caltech. As moving to a new continent would imply, if you love seeing new places and meeting new people, then studying abroad is the perfect medium. Denmark is great because almost everyone speaks English and is known as the happiest country on earth. The Danes generally practice *hygge* which is a word for feelings of wellness and contentment in everyday activities and existence. At DTU, students from Caltech live in a dorm called Kampsax Kollegiet which is divided into kitchens. The rooms are fully furnished and have a private bathroom. All the students in my kitchen are Danish so it is quite fun to be really immersed in Danish culture by these means. There are many opportunities to get to know your kitchen mates as well as other new people from weekly dinners to boardgames nights and parties.

In that same spirit of *hygge*, studies at DTU are structured significantly different from those at Caltech. Problems set are usually ungraded and the focus of the classes results in less pressure to be constantly working. Something unique to class structure in Denmark is the use of 4 hour class blocks where the first two hours are lecture and the remaining two hours are reserved for problem solving with a TA. I think an adequate analogy for class curriculum is "No Child Left Behind." The professors and the TA's prioritize complete understanding of the material over quantity of material. So, depending on your course load, the opportunity for extracurricular activities is very present at DTU. As a physics major, I am taking three advanced physics electives as well as three humanities classes. My physics classes which I am really enjoying are theory centered although applications to real world problems are frequently presented.

Living in Denmark, I've come to really love Copenhagen as it is beautiful, culturally diverse city with so many places to see. You can always find something to do Saturday

morning or Saturday night in Copenhagen. I think it's especially special when it's raining. Which as it turns out, is quite often here. Studying abroad at DTU has been one of the best decisions I've made at Caltech. I highly recommend it to anybody who doesn't hate rain or cold weather.

Claire Goeckner-Wald, 2019, Computer Science & History, Computer Science

Like many prospective study abroad students, I have always had the 'itch' for new experiences. After all, I don't know what I don't know. Studying abroad is an excellent opportunity to explore a new culture while earning academic credits. For many students, study abroad will be their first time living in Europe.

Copenhagen is one of the Scandinavian cultural powerhouses. Although the DTU campus is located outside of the city center, the mandatory Danish language classes at KU afford you an opportunity to explore the city center twice a week, as well as on weekends. There are always events going on in Copenhagen! During a term here, you can attend the Copenhagen Film Festival, watch Copenhagen Fashion Week, attend the Copenhagen Opera House, and watch a live game at the Royal Arena.

As a computer science major, DTU was a particularly good choice due to its wide breadth of course offerings. Unlike Caltech, computer science at DTU is largely practical, teaching technologies that I only could have learned "on the job" otherwise.

At DTU, class scheduling is done on a block system. Classes are held for four-hour blocks, once a week. Although this may sound tedious, classes tend towards groupwork and an active lecturing style that keeps students engaged. I find myself strongly preferring this learning style, as it allows a student to focus on one subject for a longer period of time. At Caltech, I found myself constantly context-switching between three or four subjects in a single day, which reduced my ability to complete coursework during the daytime. However, at DTU, I am often able to complete a significant portion of all class learning during the class itself due to a more mindful learning environment. The classes at DTU have high attendance throughout the term.

Praful Vasireddy '19 – Electrical Engineering, Caltech/ Electrical Engineering and Photonics, DTU

Doing my study abroad at DTU has been a great experience both academically and socially. While my three years at Caltech have been extremely rewarding, I felt that I needed a change of pace. At Caltech, most of my learning has come through problem sets and assignments. While this method of teaching has worked, this is not at all the case at DTU. At DTU, there are very few assignments and students are encouraged to study the course material independently. I have found that this style of learning takes away much of the stress that I often have felt at Caltech. Instead of being pushed to meet deadline after deadline, I can take my time and really understand the topics on my own and with the instructors' help.

I chose DTU both because I wanted to get an understanding of Danish culture and because DTU has a great photonics department. The Danish people have been very welcoming everywhere from my hallway to strangers on the street. People are always willing to help when they can, and they love to do things together. My hallway group has biweekly group dinners where we rotate who cooks, my classmates have always been open for collaboration on school work, and strangers in Copenhagen are ready to help if you ever have a problem. The Danish community is very tight knit, and the people always have a strong safety net to rely on if there is ever a problem.

I have also found a great group of friends through the DTU welcoming week activities. During this first week, you are assigned to a group with which you do various orientation activities, like Frosh Camp at Caltech. Nearly two months later, my group from that orientation still eats lunch together, meets on the weekends for activities in Copenhagen, and gets together for parties and dinners all the time. My group members are from Spain, Portugal, Germany, Italy, Australia, The Netherlands, France, Switzerland, Greece, Argentina, Hong Kong, and Singapore. This incredible range of perspectives and cultures has really helped me learn a lot about different countries and their values. Our group was led by a current master's student at DTU, and he continues to be both a great resource for information and a great friend. He still meets up with our group all the time and helps us whenever he can.

In Copenhagen and at DTU, a student will never run out of fun activities to do. There are so many talks, parties, and events that it would be impossible to attend them all. These include silent discos, seminars from theoretical physicists, boat tours, discussions about environmental science, and so much more. Danish people make sure to save time for having fun with friends, even on weekdays. After our Danish language class in Copenhagen, many of us head over to a board game café in the nearby area and play games until the café closes. Every time we have been there, the café is packed with customers, even on Wednesday nights. I think this is a great example of how lively and vibrant the Danish community is.

Academically, DTU has one of the best photonics departments in the world. Not many schools have an entire department, both for undergraduates and graduate students, focused solely on photonics. I have been able to take classes that I would have not had the opportunity to take as an electrical engineering major at Caltech. I plan to study photonics during a PhD after I graduate, and the material I have learned here will undoubtedly be invaluable. However, it is not only photonics that DTU specializes in. DTU has so many different and extremely specific study tracks that every interest can be accommodated. I am constantly surprised by how specialized some of the study tracks are here, and they allow each student to feel as though they are learning as much as they can about exactly what they are most interested in academically.

I have also had the opportunity to get involved with research projects during my time at DTU. For one of my photonics classes, I simply sent the professor an email and

talked to him after class, and I had a project ready for me to begin working on. Professors at DTU are extremely friendly, and I have talked to many people at DTU who have set up projects with different instructors. I would highly recommend to any prospective DTU exchange student who likes research to look into different professors in your field and contact them. I was able to find a position doing work that is very similar to research I have done in the past, and I hope to contribute meaningfully to the project at DTU.

Overall, studying abroad at DTU has been a great experience for me, and has really given me a different perspective on university education outside of the Caltech way of life. Instead of feeling constant pressure to meet deadlines and finish problem sets as is the case at Caltech, at DTU I feel like I can really spend time understanding the concepts I am particularly interested in without much stress. I have been able to take classes I could not have taken at Caltech, and I have met people from a wide range of backgrounds and cultures. Copenhagen is a great place to be as a young person, and I have never run out of activities to do in nearly two months. I hope that this continues for the rest of my time at DTU, and I hope that more Caltech students get to experience the same feelings that I have so far.

Amy Xiong '19 – Computer Science, Caltech/Computer Science, DTU

Studying abroad at DTU has been a great experience. DTU has a lovely campus, and since there are so many more students than at Caltech, it really is a much different experience.

Classes at DTU are taught using the block system, where most classes meet once a week, for four hours at a time. The four-hour-block is generally divided in half, with the first two hours being lecture (with breaks), and the second two hours used for project work, or for working on the exercises. Most of the classes don't have regular assignments that need to be turned in, and your grade is derived entirely from a final exam or a final project. I quite like this system, as it gives you a specified time to work on assignments and review the material, with other students and with the professor (or TAs) nearby. It also is much less pressure than the never-ending weekly problem sets at Caltech, which really allows you to do other things in your free time, and to learn at your own pace.

There are also many more classes that focus on practical material than at Caltech, and a good number of the classes expect project work. This kind of practical experience has certainly been beneficial for my education. DTU also offers many classes in subjects that aren't even touched on in the classes at Caltech, and I really appreciate the opportunity to be able to learn about subjects that I never could've otherwise.

The public transportation system is really easy to use and very convenient – buses can take you basically anywhere, and run quite frequently. In addition, the public transportation system extends to other parts of Denmark, which makes short trips to

other parts of the country must more hassle-free. Traveling to other parts of Europe has also been quite convenient, and since during orientation, you have plenty of opportunities to get to know other students studying abroad for the term, it's easy enough to find others excited to travel, as well.

Denmark is really beautiful, and the fall color is gorgeous. The surrounding nature is definitely a change of pace from southern California, and one I absolutely love. Just in general, the change in environment, in university, in culture, etc., is one that is really thrilling and enriching, and I'm really glad for the opportunity to study abroad at DTU.