



WUR Goes Abroad

1. Student Information

Field of study in Wageningen	BSc Molecular Life Sciences
Study period exchange (dd/mm/yyyy)	30/08/2021 until 23/12/2021
Country (exchange)	Denmark
City (exchange)	Kgs. Lyngby
University (exchange)	Technical University of Denmark (DTU)
Faculty (exchange)	-

2. Motivation for exchange

Why did you choose to go on study exchange?

I was and still am considering doing a MSc in Chemistry and wanted to follow more courses in this direction that are not necessarily related to the life sciences like they are at WUR. Furthermore, I saw going on exchange as a challenge and a way to grow personally, to discover a new country and get to know people from different backgrounds.

What is the reason you chose for this country/university?

I was looking for a university in the EU (because the Erasmus framework makes things a lot easier), preferably in North-western Europe. I then started going through the course catalogues and found that DTU was the only university that offered enough courses that interested me so that I could fill an exchange without difficulty or compromise.

3. Accessibility to reach destination

Do you have any tips to reach your exchange destination? (E.g. bus, train, etc.)

I drove to and back from Denmark with my parents, which was easy because I did not have to cram my belongings in one suitcase. I also went to The Netherlands for a week during the autumn break by Flixbus and train. If you want to take the train, make sure to book long in advance (on nsinternational.nl) because spots disappear fast and they get more expensive shorter in advance.

4. University and studying

Could you provide some general information about the followed courses?

	Course	ECTS	Short description of the contents	Appreciation of course: 1(low) – 5(high)	Remarks
1	26433 Organic Chemistry 3	5	This course covers reaction mechanisms in organic chemistry that go beyond the basics. The professor writes out mechanisms on the blackboard and explains them. The course also covers Molecular Orbital Theory, which is used to explain why certain reactions do or do not take place. After each lecture, there is a tutorial with practice assignments. The exam is quite similar to these assignments.	5	The professor was really smart and lectured in an engaging way (even though he only used a blackboard and chalk). I learned a lot during this course and thought it followed well after the WUR courses Organic Chemistry 1 and 2. I don't really have any remarks about this course.
2	28213 Polymer Technology	5	This course covered some topics in polymer science, like reaction kinetics, behavior under strain and phase behavior. This course overlapped somewhat with the WUR course Soft Matter.	3	The course load of this course was quite low, as there was no report/group project/practical. I always finished my homework during the tutorials. The course was fine, but it just did not really inspire me.
3	02631 Introduction to programming and data processing	5	Introduction to basic programming in either Python (which I chose) or Matlab. This is the only BSc course I followed and it has a lot of students. In the first part, you each week introduces a new topic and you have to hand in small homework assignments about them. In the second part, you have to work on two larger programming group projects, one of which is graded. There is also an exam, which includes 5 smaller programming assignments (more like the homework).	4	The course is thought through really well. Because it was taught at the same time as Chemistry at the Nanoscale, I followed this course completely from home, which was quite well doable, also because there was an online forum to ask questions. The exam assignments were a bit more complex than the homework assignments, but there were a lot of old exams available, which I used for practice. I had never followed a programming course before and this course did not go very deep, but it was a nice introduction.
4	26330 Solid state chemistry	5	This course is about crystals and their properties and focuses on linking properties of a crystal structure to properties at the macroscale. The classes are long lectures during which you make some small assignments. You also have to write a report about a particular crystal and give a poster presentation. There is a practice assignment for this on which you get feedback.	4	This course was a good introduction, but I soon understood that in order to pass the exam, I just needed to understand the homework and not really the theory. The exam was mostly just assignments from the homework but with different numbers. I really enjoyed working on the group project but it only counted for 25% towards the final grade.

5	26438 NMR Spectroscopy	5	The lectures introduce more advanced NMR techniques. The exam is an oral exam in which you get an hour to deduce a molecular structure from NMR data and have to explain your reasoning. The second part of the classes is practice with analyzing NMR spectra.	5	Practicing with analyzing NMR spectra was the main challenge of this course and this is done in quite an intensive way. Each week, you get new assignments and the teachers (who are really smart and kind!) walk around during the tutorials so you can ask questions. It was sometimes quite a struggle but at some point I did become better at it and started enjoying the puzzles. Tip: find someone to sit next to and to collaborate with.
6	25302 Chemistry at the Nanoscale	5	Introduction to new topics and techniques in the field of nanochemistry. Each lecture treats another topic and sometimes guest lecturers are invited. The course has no exams, only group presentations and reports about lab practicals. The course also does not have a grade, only a pass/fail.	3	The fact that there was no exam and that the grade was only pass/fail, made that you didn't really have to do much effort to understand the material, also because the next week the topic would be completely unrelated. The group reports and presentations did require some work and the new developments were interesting. However, in the end, I had the feeling that the course had glanced a lot of topics but that I didn't really gain a <i>deeper</i> understanding of many of them. On the other hand, if you meet the deadlines, it's almost impossible to fail this course (you can check it in the course base, no one ever fails).
7	26290 Physical Oceanography	5	Applying physics to oceans in order to understand ocean currents and climate patterns (lectures and group project).	4	Even though I had never studied anything in this direction, the course was really interesting and I did not have trouble with missing prior knowledge. I really liked how so many phenomena could be explained through physical reasoning. Sometimes the professor was a bit vague or went over things too fast.

How is the study formalized? (E.g. study forms, academic level, examination, workload, lesson material)

Most courses at DTU are 5 ECTS. The academic year is broken up into two semesters, each comprised of a 13-week period during which you are recommended to follow 5-6 courses and have class half a day a week for each course, and a 4-week intensive period during which you follow one course. I was at DTU for the 13-week period of the autumn semester (which has an autumn break in the middle). I really liked following multiple courses at the same time for a longer period of time. I took 7 courses, which was more than recommended and made things quite stressful, especially at the end of the period, when there were a lot of deadlines and 2-3 weeks of exams.

Each class for a course was 4 hours long, usually 2 hours of lecture and 2 hours of tutorial. The courses were the right level for me, even though I am a 3rd year BSc student and most of the courses I took were MSc level.

What is the culture of the university? (E.g. How approachable are the lecturers, engagement with local students? What are the differences with the WUR?)

At DTU, you are expected to take your own responsibility for your learning and for example to do your fair share in group projects. The courses focus on understanding and application, and not that much on learning things by heart. This means exams are generally open book and ask you to explain concepts or do calculations. The professors are always willing to help out when you have questions. They are really approachable, as Denmark is quite an egalitarian society.

I participated in the introduction week before the start of the semester and continued meeting up with my "buddy group" of other exchange students that I met there for the rest of the semester. Therefore, I really recommend the introduction week. I also met some people through courses. There are a lot of international students at DTU, at least in the MSc courses. All in all, I engaged mostly with other international students and not that much with Danes. Think this was also because the Danish students already had their default friends or study mates, while the international students were still looking around more.

What does the university offer the student additionally? (E.g. Catering, sports facilities, laundry facilities?)

I lived on the campus, which has a sports centre and gym, library and a lot of canteens and cafes. Especially during the last part of the period, I spent a lot of time in the library and the tables on the upper floors of the 202 building. The campus has a hiking trail around it on which I went jogging and hiking a lot.

5.Housing-travelling-living

What are the possibilities for housing? (E.g. Availability to sign up for a room on campus, private rooms, rent rates?)

I applied for a room through the housing fund (Boligfonden/BDTU) of the university. There, you get to make an ordered list of which housing complexes you would like to live in. I was offered a studio in the U2 apartments on the campus (which are a bit like Nieuwe Kanaal in Wageningen). The rent is higher than in Wageningen and the housing

office is quite bureaucratic and strict (for example, the room needs to be *really* clean before you leave), but I thought it was my best chance of getting a room without knowing anyone. In the end, I would have preferred to live in a corridor (like in Lundtoftevej or Linde Allé) instead of in a studio, because I discovered I get quite lonely when I don't have housemates.

Sometimes the WiFi where I lived had issues and the housing office did not really hurry to fix it. All BDTU housing complexes have laundry facilities.

There are also some Facebook groups in which rooms are advertised.

What is the culture of the country like? (E.g. Differences with home, local cuisine, habits, manners?)

All in all, I think the Danes are quite similar to the Dutch. Of course, there are some particularities, but I did not have a big culture shock. It is said that Danes are more reserved than Dutch people but I am not sure if the difference is as large as it is sometimes portrayed.

With regards to cuisine: there are less diverse vegetables in the supermarkets and all zucchinis and cucumbers etc. are imported from Holland. There is no fresh bread in the supermarkets. I usually had rye bread for lunch, which is an acquired taste, but also really cheap. Groceries are a bit more expensive in Denmark than in The Netherlands. In general Danes eat a bit more traditionally than Dutch people, but again, the difference isn't that large. The supermarkets offer a lot of organic food, but Danish people still eat a lot of meat, so I found that a bit peculiar.

Student culture in Denmark is focused less on traditional associations and more on drinking and partying. The university had one big student association (PF) that also had a student house that was open a lot and that sometimes hosted parties. (By becoming a member of PF, you could become a member of an association called IDA as well, which gave you free home contents insurance).

Could you give a general price indication of the place of residence compared to living in Wageningen?

The rent of my apartment was around 690 euros per month (including services). In general housing in/around Copenhagen is of course more expensive than in Wageningen. When you live in an apartment in Denmark, you can apply for housing benefits (Boligstøtte), which save you quite a lot of money (in my case 100 euros per month). In order to get this, you need a NemID (like a DigiD), and in order to get a NemID, you need a CPR number (like a BSN number), and in order to get a CPR-number, you need a residence permit. This is quite an administrative hassle and some of the offices you need to visit for this have a waiting time, so it helps to start the process early (before the bulk of the other international students).

Could you give some information about public transport infrastructure? (E.g. Cost public transport card, taxi prices, how to travel to the university?)

Around Copenhagen, there is a good network of busses, regional trains, local trains, metros and S-trains (commuter trains, a bit like above-ground metros). When you want to travel occasionally, like from the campus to the centre of Copenhagen during the weekends, I recommend getting an anonymous Rejsekort, which you can get at every 7-Eleven for

example. This is cheaper than buying tickets on your phone with the DOT app. You can get an Ungdomskort (student discount) on a personal Rejsekort, which can make a regular commute cheaper. When you want to go from the campus to the centre of Copenhagen, you can take a fast bus or first go to the centre of Lyngby by bike and then get the S-train.

Denmark is bike-friendly (although a bit less than The Netherlands. For example, the traffic lights are really annoying). I rented a bike from Swapfiets in Copenhagen. In the S-trains, bringing a bike is free.

6. Free time

What are must-sees in the area? (E.g. nearby destinations, how do you prefer to travel, when to plan?)

There is a lot to do in Copenhagen of course (it has many museums and churches for example), but there are also nice places near the campus, like the deer park, the beach or local forests.

What does not appear in the travel guide, but is worth a visit?

Many museums in Copenhagen have free entrance one day of the week. Cycling around the Amager island south of Copenhagen is a nice daytrip.

Do you have general tips and tricks about leisure time (E.g. recommendations for restaurants, going out?)

Bastard Café in Copenhagen has a lot of board games and there you can spend entire afternoons when it's raining outside. There are also a lot of nice coffee bars in Copenhagen where I spent a lot of time studying, but they are more expensive than in The Netherlands.

7.Challenges & best moment abroad

What was a challenge you have experienced?

Feeling lonely and missing my family and my friends in Wageningen. I met a lot of new people during my exchange, but because it was so short, these were people I felt less familiar around than the people I knew from home.

What was your best memory abroad?

The Christmas dinners I had with the friends I had made during my exchange, just before I returned to The Netherlands.

8. Contact details (optional)

Is the reader allowed to contact the writer?	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>
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