# Exchange Norwegian University of Science and Technology, Trondheim – fall 2015

#### **General information**

During the fall of 2015 I went to Norway to study at the Norwegian Unitiversity of Science and Technology (NTNU) or Norges Teknisk-Naturvitenskapelige Universitet. I stayed in Trondheim from 9th of August until 21st of December. The introduction week started at August 10th and classes started one week later (August 17th). Although Trondheim is a small city compared to Rotterdam, NTNU is a large university with nearly forty thousand students. This means Trondheim has a lot to offer for students.



# **Preparation**

## **Paperwork**

After you have been nominated by the Erasmus University at the host university you can start your application. To apply to NTNU you need to fill in an online form. You can directly indicate that you want to apply for a room of SiT, the student welfare organization that also organizes student housing. I would really recommend doing this, since it can be very hard and expensive to find a room yourself. After finishing the online application, you also need to send hard copies of your documents. This includes an official copy of your transcript and a certified copy of your passport (may be signed and stamped by representative of your own university). NTNU probably lets you know whether you're accepted pretty late and the same holds for a housing offer, so don't be surprised if other people already heard from their universities and you haven't heard anything yet. After you have been accepted you need to search for courses you want to take and fill out the learning agreement. When you are a EU citizen you don't need a visa to stay in Norway. When you're staying in Norway for less than 6 months you only need to register at police station, appointments are made by NTNU. Prepare for some waiting time since many students will have to go on the same time. Also make sure you have all required documents with you, otherwise you can come back another time again.

### Housing



After you're accepted by the university you get an email about application for housing. When filling out your housing preferences, you can choose between two student villages Moholt and Steinan, which both offer furnished rooms. My room was located in Moholt, where most international students were living. You share your kitchen and bathroom with three roommates. Moholt is located closer to the main campus of the university and the city centre than Steinan and has better bus connections.

# **Traveling**

When booking your flight to Trondheim it might be worthwhile to check out the youth tickets of SAS airlines, which offer low fares for people under 26 years old. This can save you a lot of money, although you'll need to transfer (KLM flies directly between Amsterdam and Trondheim). If you fly

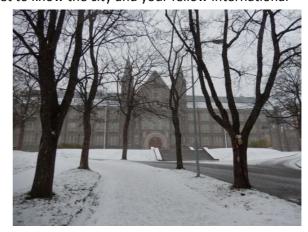
via Oslo, remember that you need to pick up your luggage and check in and go through security again, so don't book too short transfers. If you fly via Copenhagen you don't have to do this, since you don't change between international and domestic flights.

#### **Arrival**

The easiest way to get to the city from the airport is by buss. There are two bus companies driving between the airport and the city, nettbuss and vaernes-expressen, but only vaernes-expressen is passing by the student villages. You need to get of at Moholt Studentby (also the name of the busstop) to pick up your key at the office of SiT. I was lucky and one of my roommates had already been living in our appartment the year before, so I didn't have to buy any kitchen supplies.

The day after my arrival the introduction week started. The introduction week consists of two parts. One part concerns academic issues such as information about registering for classes and activating your student account. The other part is the social part, for which you need to pay a small fee to participate, which covers activities and food. I would highly recommend taking part in this part of the introduction week too, as it is a great way to get to know the city and your fellow international

students. The introduction week was a busy period, but also a great start of my stay in Trondheim. During the first day of the introduction week we played the Trondheim games, during which we had to explore the city and answer questions. Other activities were a hiking tour in Bymarka, a forest area close to the city, and an activity called 63 degrees North, which took place at Kristiansten fortress. For several activities during the introduction week you need to register and spots are limited, so make sure you register on time!



#### **Courses**

During my semester at NTNU, I took three courses, giving a total of 30 ECTS. Most people took four courses, but since one of by courses counts for 15 ECTS I was only taking two others.

#### *Norwegian Society (15 ECTS)*

This course, which is designed especially for exchange students, discusses among other topics Norwegian politics and economy, the welfare state and family and child policies. Interesting topics were for example the design and functioning of the Norwegian health care system and policies promoting gender equality and female participation in the workforce, such as the fathers' quota. The lectures of this course are given by different lecturers who all present their area of specialization. The lectures are very interactive and often raise discussions comparing Norwegian policies to those in other countries. During this course several activities were organised, such as a visit to the Nidarosdomen (the large cathedral in the city centre), the justice museum and an archaeological walking tour through the city. For the exam of this course we had 6 hours, since it is a 15-credit course. To be allowed to take the exam you need to hand in one term paper related to one of the topics discussed during the lectures. Even though many topics are covered during this course, it is not the hardest course. Still, I found it very interesting to learn more about Norway and its organisation and policies to better understand the country you're living in.

# Cryptography (7.5 ECTS)

The cryptography course is a master level mathematics course. It discusses classical cipher methods, security requirements and mathematical algorithms to break them. Large part of the mathematics in this course concerns algebra such as groups, rings and fields. This course provides explanations on how to break algorithms by calculating discrete logarithms over finite fields or using elliptic curves over finite fields. As can be expected from a master level course, this course wasn't easy, but it was a very interesting course.

## Supply Chain Control and Advanced Decision Support (7.5 ECTS)

The course Supply Chain Control and Advanced Decision Support consists of two parts. The first part discusses supply chain characteristics, logistics and operations, such as delivery and distribution, replenishment, use of IT systems and forecasting. The second part of the course concerns decision support techniques and their applications in supply chain decision. This includes the use of operations research techniques such as queuing theory, linear programming and simulation. During the semester several assignments and a semester paper needed to be handed in in groups to be allowed to take the exam. The topic of the semester paper was a real case problem to which you needed to apply the different theories and techniques discussed during the course.

#### **Finances**

Norway isn't the cheapest country to live in. Doing groceries in Norway is quite expensive, but as with other expenses, large part depends on your own choices.

## One time expenses:

- T:kort (public transport): with student discount around €150 for the semester
- Bike: many students want to buy a bike at the beginning of the semester, since it is an easy
  way to get around town (although you have to get used to the hills when you're used to
  biking in the Netherlands). You can probably buy a bike for around €75 and if you're lucky
  you can sell it at a reasonable price when you leave (although not many people are looking
  for a bike in winter)
- Sim-card: bought from ESN at 50NOK (≈€5,50), including 30NOK credit, can be recharged by buying a code at for example a grocery store
- Membership NTNUI (sport organisation of the university): around €100 for one semester.
   This membership is required if you want to participate in one of the sport teams.

#### Mothly expenses:

- Rent: around €350 for a room in Moholt student village, if you need to find a private room it can be more expensive
- Groceries: around €100-150 per month

# Daily life

Trondheim is a great city to live in, since it has a lot of activities to offer to students, but also gives the possibility to enjoy Norway's beautiful nature. If you buy a public transport card, you can also use this to take the tram to Lian, where you can start a hike through Bymarka or enjoy yourself at the lake. Both by bike and by bus it is easy to get around the city. The university campus is located just outside the city centre, so it is located in a very central place. I would recommend taking part in one of the student or sport organisations. This is a great way to have fun and get to know more Norwegian students. I joined the rowing team during my semester at NTNU and I made a lot of friends on the team. Furthermore, since so many international students are living in the Moholt

student village, there is always something to do. During the first week we had great weather and many people took this possibility to get together, play beach volleyball and to get to know each other.

In conclusion, I had a great time during my exchange at NTNU. The courses were very interesting and the lecturers were enthusiastic. The introduction week was a great chance to get to know the city, the university and your fellow international students. The many student organisations offer a great possibility to get in touch with Norwegian students.