



## Electrical Engineering Trip to the Netherlands 2024: Global Engineering Experience

**Dates:** February 18 – 24, 2024

### Program Details:

#### Day 1: Travel to Amsterdam

#### Day 2: Day trip to Eindhoven

Possible trip to ASML and visit to TU Eindhoven where students will visit the Electromechanics and Power Electronics labs. [ASML](#) stands tall as a global beacon in the realm of chip manufacturing. It is acclaimed as the paramount entity worldwide dedicated to the construction of the intricate machines that underpin the very foundation of chip production. As we tour ASML, we may witness the cutting-edge technology that drives the semiconductor industry forward. [TU Eindhoven](#) is a prestigious technical university nestled in Eindhoven, a city renowned for its technological prowess. Among the distinguished research labs at TU Eindhoven is the Electromechanics and Power Electronics lab, presided over by the esteemed Elena Lomonova. Here, on the forefront of high-precision robotics research, we may witness the cutting-edge developments that drive industries reliant on automation and precision.

#### Day 3: Day trip to Delft

A visit to Delft promises a unique juxtaposition of cutting-edge technology and sustainability initiatives. You'll have the opportunity to explore the forefront of quantum computing at the House of Quantum [House of Quantum](#) and witness the practical implementation of sustainable technologies at The Green Village [The Green Village](#). These experiences may provide valuable insights into two pivotal areas of innovation shaping the future of science and society.

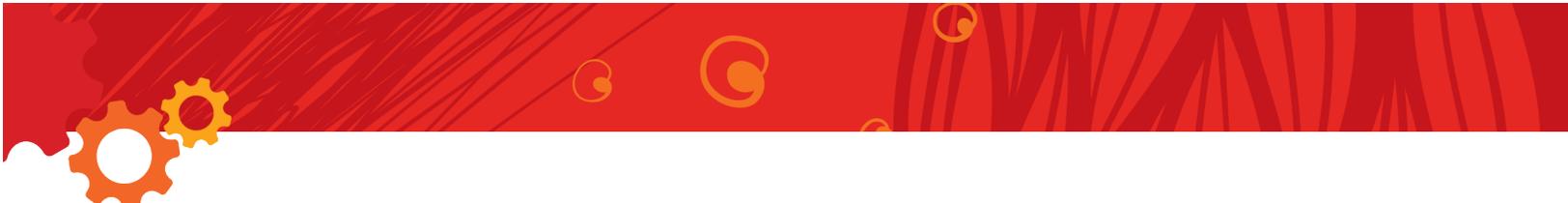
#### Day 4: Day trip to Eindhoven

Day trip to DAF. [DAF](#) specializes in designing and manufacturing a wide spectrum of commercial vehicles, ranging from light to heavy-duty. In addition to their excellence in vehicle design, DAF's commitment to sustainability is evident through their dedicated research lab. This lab focuses on innovations that enhance the ecological footprint of transport trucks, reflecting DAF's dedication to a greener future. Some of the projects include superconducting AC coils, wireless power transfer for robotics applications, active suspension systems, planar motors, and pick-and-place actuation.

#### Day 5: Day Trip to Amsterdam

Visit the Amsterdam Science Park: QuiX, QA experience and Strontium Lab.

[QuiX Quantum](#) is known for their Quantum Inspire platform, which provides a collaborative environment for researchers, students, and industry professionals to develop, simulate, and experiment with quantum algorithms and circuits. When visiting QuiX, you can expect to learn about quantum computing, experience quantum hardware, and engage with experts.



[Strontium Lab](#) is involved in the research of ultra-cold atomic gases, specifically strontium atoms, crucial for understanding fundamental quantum phenomena. During your visit to Strontium Lab, you can expect to explore quantum matter, atomic clocks, and quantum simulation.

[QA Experience](#) is a demonstration room that showcases various quantum setups and experiments. This immersive experience allows visitors to see interactive demonstrations, real-world applications and to meet quantum innovators.

## **Day 6: Departure to Calgary**

### **More information:**

**Participants:** Open to a maximum of **20 undergraduates** in **Electrical Engineering major**. Students are required to complete the Global Engineering Experience application form. They must participate in all pre-departure education, meetings, and preparation activities.

**Eligibility:** Students who have a minimum GPA of 2.0, **have not previously participated in the Global Experience** program and in all years of their **Electrical** Engineering major are welcome to apply. Students must be currently eligible and have valid visas for travel to the Netherlands, as well as all supporting travel documentation required for their destination. Please note, **passport must be valid at the time of application**.

**Cost:** Students eligible for this program will be required to pay out of pocket **\$1,750**. This includes round-trip airfare, field trips, local transportation, emergency medical insurance, and accommodations. Some meals will be provided (program dependent), but students should budget for food and snack purchases.

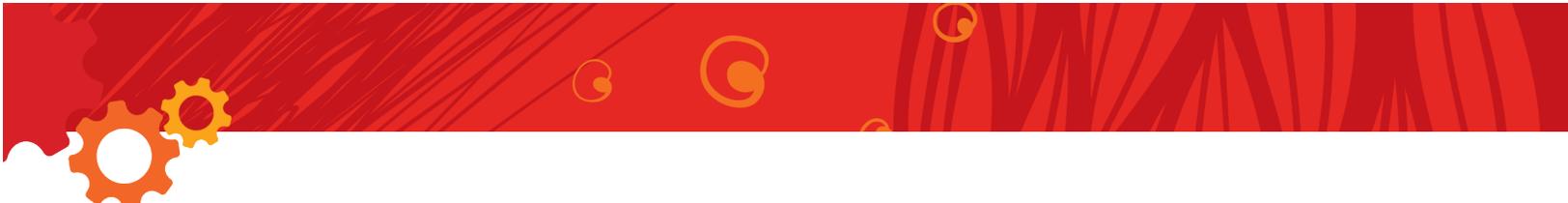
**Funding:** Due to the significant existing financial contribution from SSE, students will not be eligible to receive Schulich Student Activities Funding (SSAF) or UCalgary International Funding for these experiences.

**Pre-departure:** The Engineering Student Centre and Chaperone(s) will host a mandatory pre-departure session for students. Topics covered will include student rules of conduct, customs/norms of the destination countries, attendance expectations, and a full overview of the agenda. Students will also be expected to complete online study abroad module in D2L.

**Student conduct:** Students will be bound by university non-academic misconduct policies and will be required to sign the SSE Rules of Engagement for Group travel document. If misconduct occurs, the faculty chaperones, in consultation with the Dean's Office, reserve the right to send the student(s) home. Students will be required to sign risk and student conduct waivers at the pre-departure session.

**Additional student expenses:** Managed directly by program participants:

- Meals (breakfast may be provided)
- Additional baggage fees (if required)
- Passport & Photos (If required)

- 
- EU Visa (if required) or ETIAS ([https://travel-europe.europa.eu/etias\\_en](https://travel-europe.europa.eu/etias_en))
  - Immunizations: based on recommendations from travel clinic, cost varies depending on individual circumstances and destination countries
  - Travel insurance (emergency response will be included)