Job Posting: 189960 - Position: Design Engineer: Design of energy storage and

efficiency

Co-op Work Term Posted: 2020 - Fall

**App Deadline** 08/17/2020 10:00 AM

Application Method: Employer Email

**Posting Goes Live:** 08/10/2020 03:45 PM

Job Posting Status: Approved

## ORGANIZATION INFORMATION

Organization Solar-Ventures Research Corp

**Division** Victoria Office

# JOB POSTING INFORMATION

## **Special Job Requirements**

Work Duration: 8 months (An 8 month employment period is registered as 2 separate, consecutive work terms)

Please ONLY apply if you are available for 8 months, and state your availability CLEARLY in your cover letter.

For Engineering Undergraduate Students: Before applying to this posting, it is your responsibility to have completed the appropriate pre-requisite courses for this length of work term, and to understand how this length of work term affects your academics. If this means you will be registered in a 5th or higher work term, the full co-op tuition fee (equal to two installments) will be charged for each additional work term above the mandatory four. See links below for more details.

- Engineering Tuition installments (two installments per work term). https://web.uvic.ca/calendar2019-09/undergrad/info/tuition/engineering-tuition.html
- •Undergraduate Tuition the complete co-op fee (for those doing a 5th or higher work term). https://web.uvic.ca/calendar2019-09/undergrad/info/tuition/undergrad-tuition.html

Students are urged to apply a.s.a.p. to this opportunity. The company does not wait until the Learning In Motion closing date to begin reviewing applications; rather, they review apps as they appear. The earlier you apply, the better!

\* You are also required to click <u>"EXPRESS INTENTION TO APPLY"</u> for this posting if you are submitting an application to their online portal

Co-op Work Term 2020 - Fall

Position Type (Disclaimer: not

all types available in all

Regular Co-op, Full Time

programs)

Co-op Work term Duration 8 Months Full Time (2 Work Terms)

Job Title Design Engineer: Design of energy storage and efficiency

Job Location Victoria

**Region** BC-Victoria (Capital Region)

Number of Positions 2
Work Abroad No

**Job Description** 

Solaires Entreprises Inc. is a clean tech company located in Victoria BC operating under the name Solar-Ventures. Solar Ventures

consists of a diverse team of scientists, engineers, marketeers and clean energy enthusiasts united for one common goal: develop the next generation of solar cells. We've developed a patent pending solution that includes the production of photovoltaic blinds that will help office building tenants meet energy efficiency requirements by producing clean energy, reducing glare and controlling heat gain and loss.

\*For more information please go to www.solar-ventures.com .

#### Job Description:

We are looking for 2 coop students who can contribute to our project. The team members are expected to perform literature review, modeling and simulation, and data analysis on energy storage for solar panels and grid-connected solar cells, design and operation of power converters (Grid-Tied Solar Inverters and Off-Grid Solar Inverters) and how to achieve high efficiency for different power configurations. The team will work under the supervision of the Design Engineer and Product Design Manager.

The team can help our company develop the project by completing the following tasks:

- Research on energy storage systems and grid-connected solar cells
- •Research on design and operation of power converters (Grid-Tied Solar Inverters and Off-Grid Solar Inverters)
- •Cost analysis for different different systems and components

#### Qualifications

#### Knowledge and Skills

- Strong research skills
- Modeling and simulation skills
- •Basic knowledge about solar cells and semiconductors
- •Basic knowledge about bi-directional inverter, PV panels, battery system, smart meter, direct current (DC) bus system, and alternating current (AC) bus

## **Academic Requirements**

· Bachelor's or Master's degree in physics, Electrical or Mechanical engineering or related fields.

### **Additional Qualifications:**

Please note that this position is partially funded by Federal funding and the funding program requires that students be:

- Under 30 years of age
- •A Canadian citizen, Permanent Resident or have refugee status in Canada.

For relevant employers as defined by the BC Criminal **Review Act: Will this position** require a co-op student to complete a Criminal Records check?

No

**Minimum Academic Year** 

1

Completed

**Minimum Work terms** Completed

0

Are there any restrictions that would hinder hiring of non-Canadian students with a valid work permit?

Yes

# APPLICATION INFORMATION

**Application Procedure** 

**Employer Email** 

If by Email, send to

adam.d.bruce@solar-ventures.com

# **Additional Application Information**

# **Additional Qualifications:**

Please note that this position is partially funded by Federal funding and the funding program requires that students be:

- Under 30 years of age
- •A Canadian citizen, Permanent Resident or have refugee status in Canada.

All Degrees and Disciplines

No