



International Experience During the Undergraduate Course

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Outline

- University of Campinas (Campinas, Brazil)
- School of Electrical and Computer Engineering (FEEC)
- Undergraduate research
- Opportunity abroad
- Ryerson University (Toronto, Canada)
- Some activities
- Achievements
- Some links

University of Campinas (Campinas, Brazil)

- A state-funded university in Campinas (Sao Paulo state – foundation 1966)
- Budget: U\$ 1.5 billion (state 2/3 + external funds 1/3)
- Students: 35,000 (19,000 undergrad/16,000 grad)
- Faculty members: 1,900 (99% with a Ph.D. degree)
- 2nd patent leader in Brazil
- 2nd position in the QS University Ranking - Latin America
- 1st position in the Times Higher Ranking - Latin America
- 250+ surviving spinoff companies (20,000+ jobs)

School of Electrical and Computer Engineering (FEEC)

- 70+ faculty members
- Six major areas: energy, control, telecom, computer, biomedical and electronics
- Undergrad
 - current: 900+
 - past: 4500+ (3500+ EE; 1500+ CE)
- Grad:
 - current: 600+
 - past: 3000+ (15% of all Brazilian Ph.D./year)
- 47th position QS World University Rankings by Subject 2015 - electrical & electronic engineering

Undergraduate Research

- Usually one-year project under supervision of a Dr. at the University
 - A gateway to undergrad students start involving to research
 - It is not mandatory in the undergraduate course
- Grant to develop the project
 - PIBIC, SAE, FAEPEX, **FAPESP**,...
 - The student and the supervisor have to submit a project and apply for the grant
 - The student, the supervisor and the project are evaluated
 - The student has to have good academic performance in order to get the grant

Opportunity Abroad

- Students who have Undergraduate Research Project with FAPESP support can apply for an internship abroad in other University/Research Centre during the project in Brazil
 - Subproject of the main research project in Brazil
 - Evidence that the internship abroad will contribute to the project under development in Brazil
- The University/Research Center abroad has to have excellence in its area
- One of the only exchange between Universities for Brazilian undergraduate students related to research

Ryerson University (Toronto, Canada)

- 125 research institutes and labs
- Over 45,000 students
- 100+ undergraduate and graduate programs
- 133 partner universities in 37 countries
- 20 Canada research chairs
- 900 affiliated and adjunct graduate faculty
- 2nd on National Reputation Ranking by Maclean's magazine (2015)
- Centre for Urban Energy (CUE)
 - \$ 29.4M funding
 - 71 projects
 - 33 startups



Activities

■ Research Opportunities

- Industrial Projects

■ Conferences

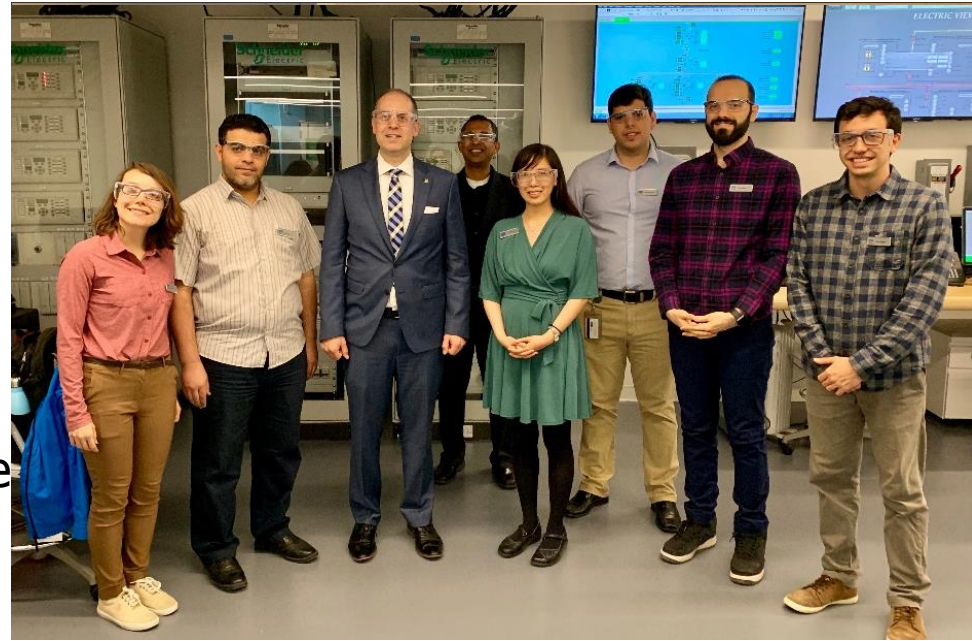
- Mohamed Lachemi,
Ryerson President
- Discovery
- Bill Morneau,
Minister of Finance

■ Workshops

- Ontario's Minister of Finance
Clean Energy Zone.
- Stephen R. Ford, Deputy Mayor of Toronto

■ Lectures

- Merrilee Fullerton,
Mr. Praveer Sinha,
Ontario Minister of Training, Colleges and Universities
CEO & Managing Director of Tata Power



Achievements

- Technological competence
- Global awareness
- Entrepreneurship
- Creativity
- International collaboration



- Life in another country
- Challenges
- Independency

Some links

- <https://www.inova.unicamp.br/premioinventores/2019/07/campea-pelo-segundo-ano-consecutivo/>
- <https://www.inova.unicamp.br/premioinventores/wp-content/uploads/2019/07/inventoresweb.pdf>
- <https://www.ryerson.ca/cue/news-events/blog/2019/07/brazilian-masters-students-reflect-on-six-months-well-spent-in-canada/>
- <https://www.ryerson.ca/news-events/news/2019/06/bold-research-better-cities/>
- <https://www.ryerson.ca/cue/news-events/blog/2019/07/experts-share-knowledge-on-future-of-energy-storage-at-nest-week-2019/>
- <https://www.unicamp.br/unicamp/>
- <https://www.fee.unicamp.br/>
- <https://www.ryerson.ca/cue/>

Thank you!



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