Building Community: 
Graduate Programs, **Industry Internships** and Courses

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Professional Development Club

• A club created by Faculty of Engineering Professional Program Students to engage professional program students in networking events, social activities, and professional development workshops and mentoring to help them develop their professional careers.
• Check out the website: https://professionaldevclub.wordpress.com/
• Join the facebook group to be connected and stay informed: https://www.facebook.com/groups/19397473694646467/
• Participate in the Professional Development Workshops: http://www.site.uottawa.ca/~lpeyton/syllabus.html
Who Am I?

• Vice-Dean, Graduate Programs
• **www.create-best.com** – Biomedical Smartphone Apps

• **Previously**
  • Enterprise BI and BPM - Ottawa, McGill, William Kaiser Hospital (Toronto)
  • **Startup:** ESRI Canada (Ottawa Research Center)
  • **Startup:** ProntoForms (Wesley Clover company)
  • Undergrad Software Engineering, 100% COOP
  • PhD Electronic Business (Engineering, Telfer, Arts)

• **Ancient History**
  • Scandinavia: Krysten Nygaard, Software Engineering
  • Silicon Valley: Terry Winograd: Google, Ed Feigenbaum: Expert Systems
Programs

- ~750 Project students (MEng), ~750 Thesis students (MSc, PhD)
  - Electrical and Computer Engineering
  - Mechanical Engineering
  - Chemical Engineering
  - Civil Engineering
  - Computer Science

Applied Artificial Intelligence *New 2018

  - Bioinformatics

  - Environmental Engineering
  - Biomedical Engineering
  - Advanced Materials and Manufacturing
  - Engineering Management *Diploma *Online...soon
  - Electronic Business Technologies ... Digital Transformation and Innovation
  - Systems Sciences
Graduate Studies: Thesis vs Professional Programs

• **2008**: 750 grad students, 70 of which were Professional Programs
• **2018**: 1500 grad students, 750 of where were Professional Programs

• **Professional Programs**: 1000% growth over last 10 years
• **Thesis**: 10% growth over 10 years

... but 25% of current thesis students are new interdisciplinary programs: E-Business, Environmental, Biomedical, Systems Science ..
Professional Development / Industry Practice

GNG 5120  Technology entrepreneurship
GNG 5121  Planning of Experiments in Engineering Design
GNG 5122  Operational Excellence and Lean Six Sigma
GNG 5123  Enterprise Architecture
GNG 5124  Internet Technologies and Mobile Commerce
GNG 5125  Data Science Applications
GNG 5130  Business Communication and Influence
GNG 5131  Sales and Influence for Engineers
GNG 5140  Engineering Design
GNG 5141  Creativity and Innovation
GNG 5231  Sales Engineer Internship Project
GNG 5300  Topics in Engineering
  - Applied Data Science, Systems Integration, Spectrum Management
GNG 5310  Topics in Industry Practice
  - Ethical Design AI/Robotics, Supply Chain / Operations Management
GNG 5299  Industry Internship Project
Why am I here (to meet with Industry)?

To ask industry
to help uOttawa Engineering
help industry

• Industry number one need: TALENT
• uOttawa number one priority: TRAIN ... Highly Qualified Professionals
• We need your input participation in:
  • Defining uOttawa role in the community (certifications, facilities, events)
  • Creating & Delivering the right courses / programs for advance training
  • Project-based learning and internships
Course Credit for Industry Experience - New summer 2019
- uOttawa mentors students in professional development (weekly workshops and events)
- Industry provides projects and evaluates results
- unpaid internship, paid internship (e.g. Mitacs), coop work term, full time employee (studying part-time) or standalone industry/uOttawa collaboration
- Projects coordinator qualifies students and interfaces to interested companies

Launched Summer 2019
- Ciena, Treasury Board, City of Ottawa, local startups ...
Events for networking and projects

Ribbon Perspectives19 @ JW Marriott Washington, DC
Apr 28 - May 1

Juniper Academic Boot Camp @ Ryerson University
Apr 29 - May 1

Smart City & IoT Boot Camp
Apr 30 - May 1

It’s that time of year again to join us as we embark on a mission to transform healthcare by connecting healthcare professionals with user experience designers, software developers, innovators, and patients.

Hacking Health Ottawa #HIP613 Hackathon
Shopify Headquarter
150 Elgin Street
May 31st - June 02

Get Your Tickets

Sponsored by Juniper Networks Academic Alliance program, CENGN, and Ryerson University, this training event will bring together university students for five days of stimulating technical training. Take the first step towards growing your career options by participating in this unprecedented opportunity! This course has been designed for networking, engineering, and computer science students with beginner/intermediate knowledge.

The conference program covers Smart City Vertical Application such as Smart Grid, Smart Transportation, Smart Health, Smart Building Management Systems, Enterprise IoT, Smart Lighting, Fog Computing, Big Data Analytics and Smart Governance. The aim is to educate people towards smart cities and urban planning technologies, strive for innovation, promote innovative business solutions and connect thousands.

Innovators competing for the winning启动. This session will explain how businesses can leverage CENGN’s network infrastructure and technical expertise to commercialize their innovative products and solutions, including Details on how a project can
Events for Research

• Research Poster Competition
• Design Day
• Awards Ceremony
• 3 minute thesis
Coming Soon …

• Masters in Entrepreneurial Engineering Design
  • Courses and mentoring to create technology startup … feeding into MakerLaunch Accelerator [http://makerlaunch-uottawa.ca/en](http://makerlaunch-uottawa.ca/en)

• Masters in User Experience Design
  • Interdisciplinary with Faculty of Arts and Telfer School of Business
  • Strong industry presence on program committee, course/program development and delivery

• Professional Development Courses/ Continuing Education

• Stackable Credentials, Industry Partners
  • CENGN, Stallion AI, ....

• Certificates
  • Entrepreneurship, Engineering Sales, Enterprise Architecture, Data Science ...