GGE Remote: Flexibility Without Compromise

5 October 2024 | Robert Kingdon | gge@unb.ca

1. Legacy

Surveying Education at UNB

King's College

1785

University of New Brunswick

1840 1859

Geodesy & Geomatics

1960 1994

GGE Remote

2010 2024

First Surveying Lecture

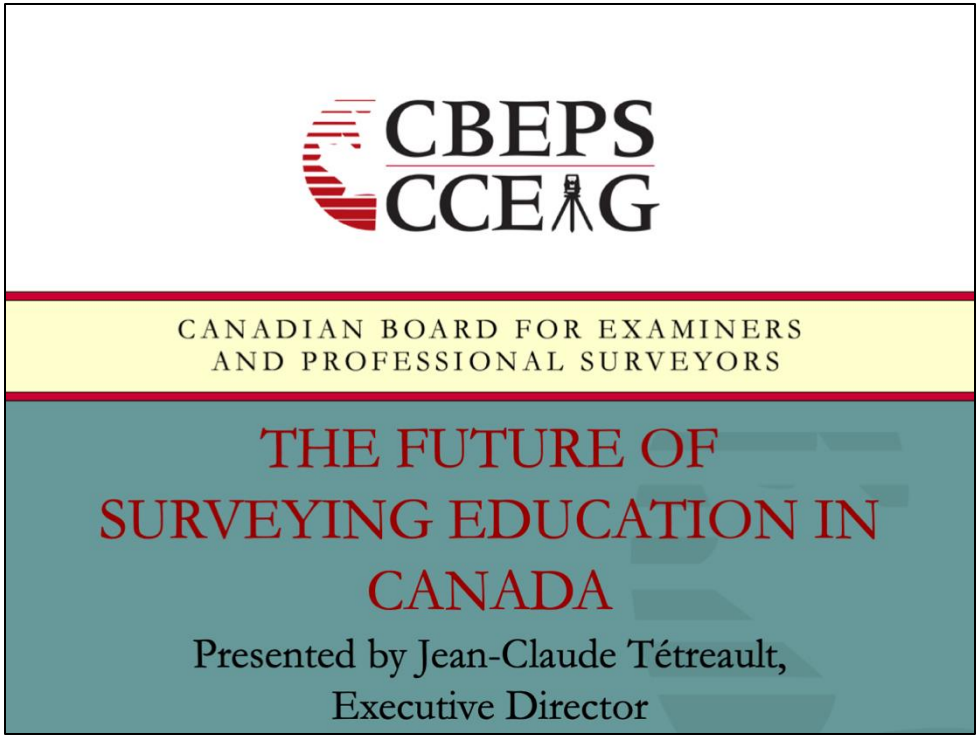
Surveying Engineering

Bachelor of Geomatics

2. A Twinkle in our Eye

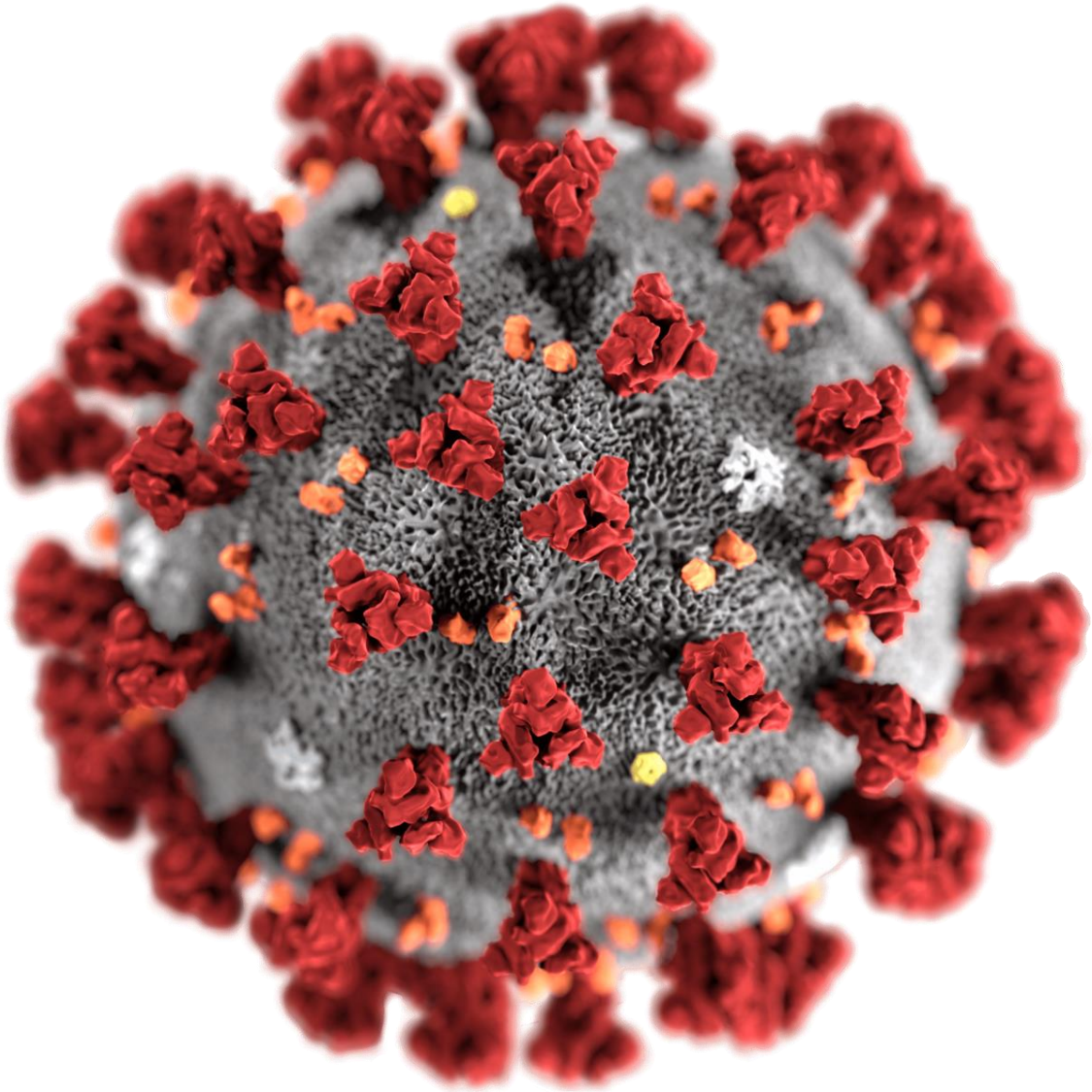
The Nucleus of an Idea

- **Surveying capacity gap**
  - Average <50% of required
  - Retirements
  - Low enrollments
  - Challenges to hiring international
- **CBEPS Future of Surveying Education Task Force (2018+)**
- **Opportunity**
  - Can UNB GGE deliver a **quality** online surveying education?



3. Crisitunity!

Motivation



A Different Perspective

GGE Remote Additions

4. The Best of Both Worlds

What Does Hybrid Look Like?

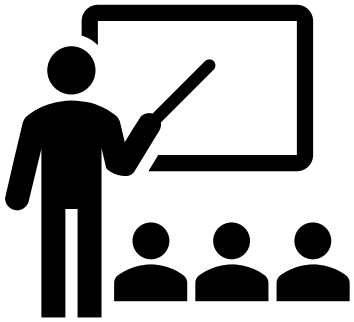
1. **Hybrid Teaching**

2. **Remote Assignments**

3. **Remote Assessments**

1. Hybrid Teaching and Learning

In Person Classes



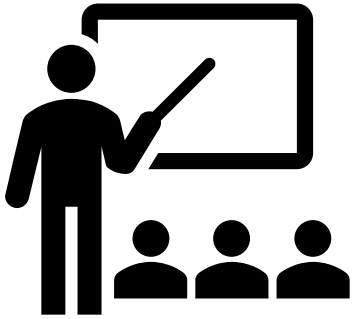
Body Language

Visuals

Collab. Tools

Voice

Remote Classes



Body Language

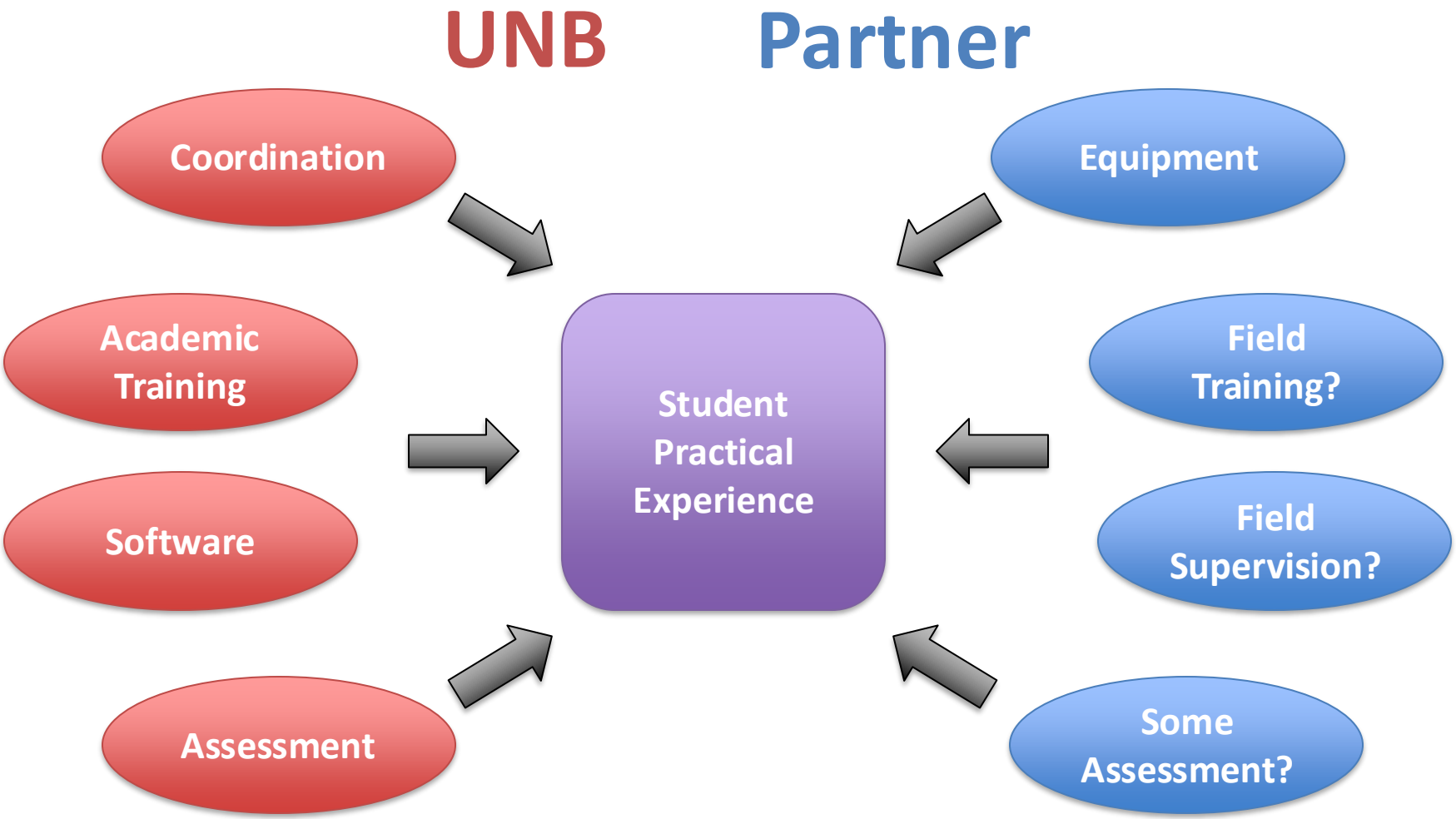
Visuals

Text Chat

Collab. Tools

Voice

2. Practical Exercises: Industry Partnerships



2. Practical Exercises: Guidance

tal up) is less than 10°, with the horizontal angle between the targets bei
°. The third target should be placed at an elevation angle of at least 30°. A
e configuration is shown in Figure 1.

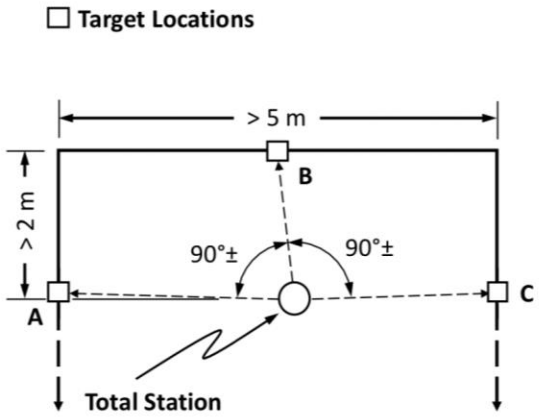


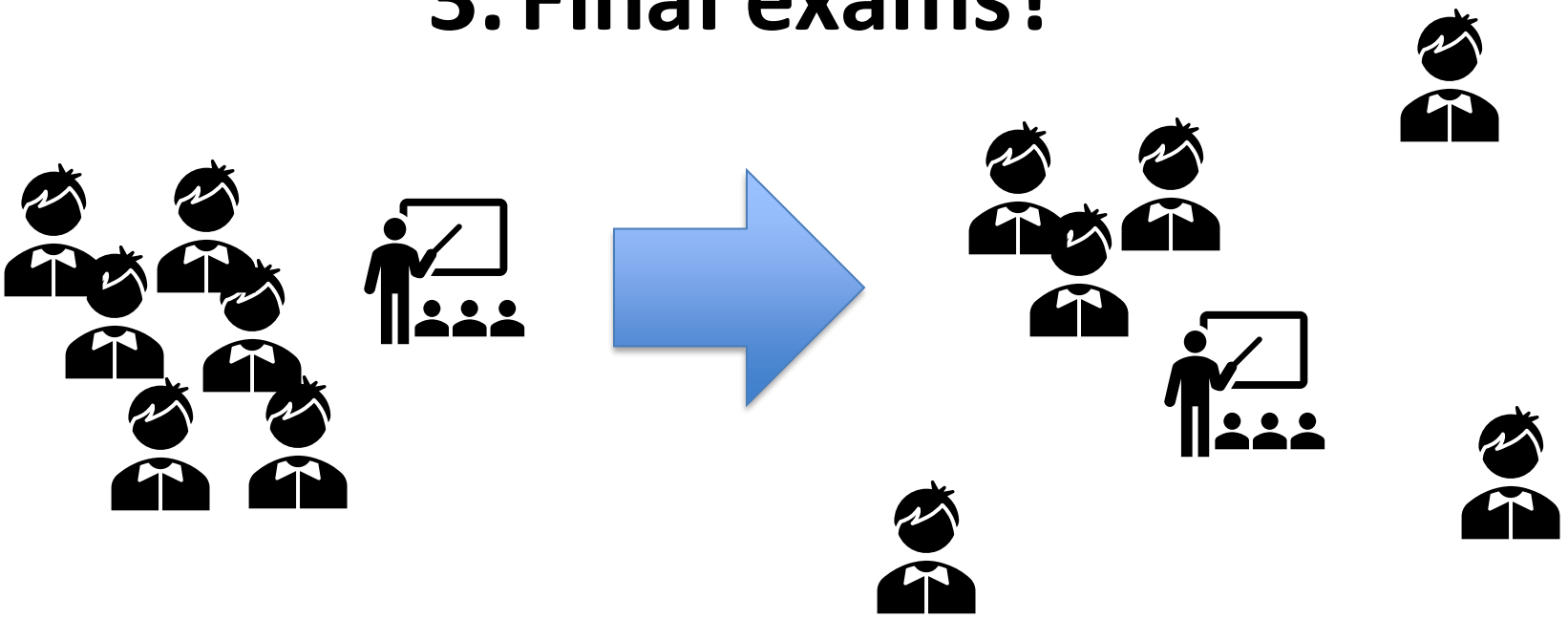
Figure 1. Example space configuration.

ient required for this task includes:

1 total station of any precision,
1 tripod and tribrach,

3. Remote Assessments

1. **Constructive Alignment**
2. **Technology**
3. **Final exams?**



5. Approval!

What have we learned?

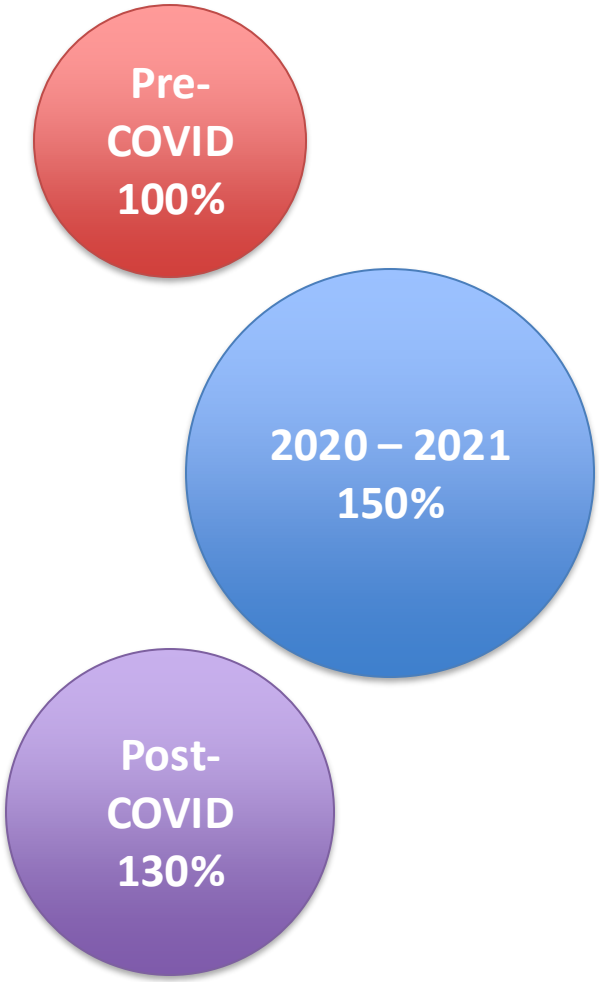
Sometimes you have to dive in

Many benefits, but great effort

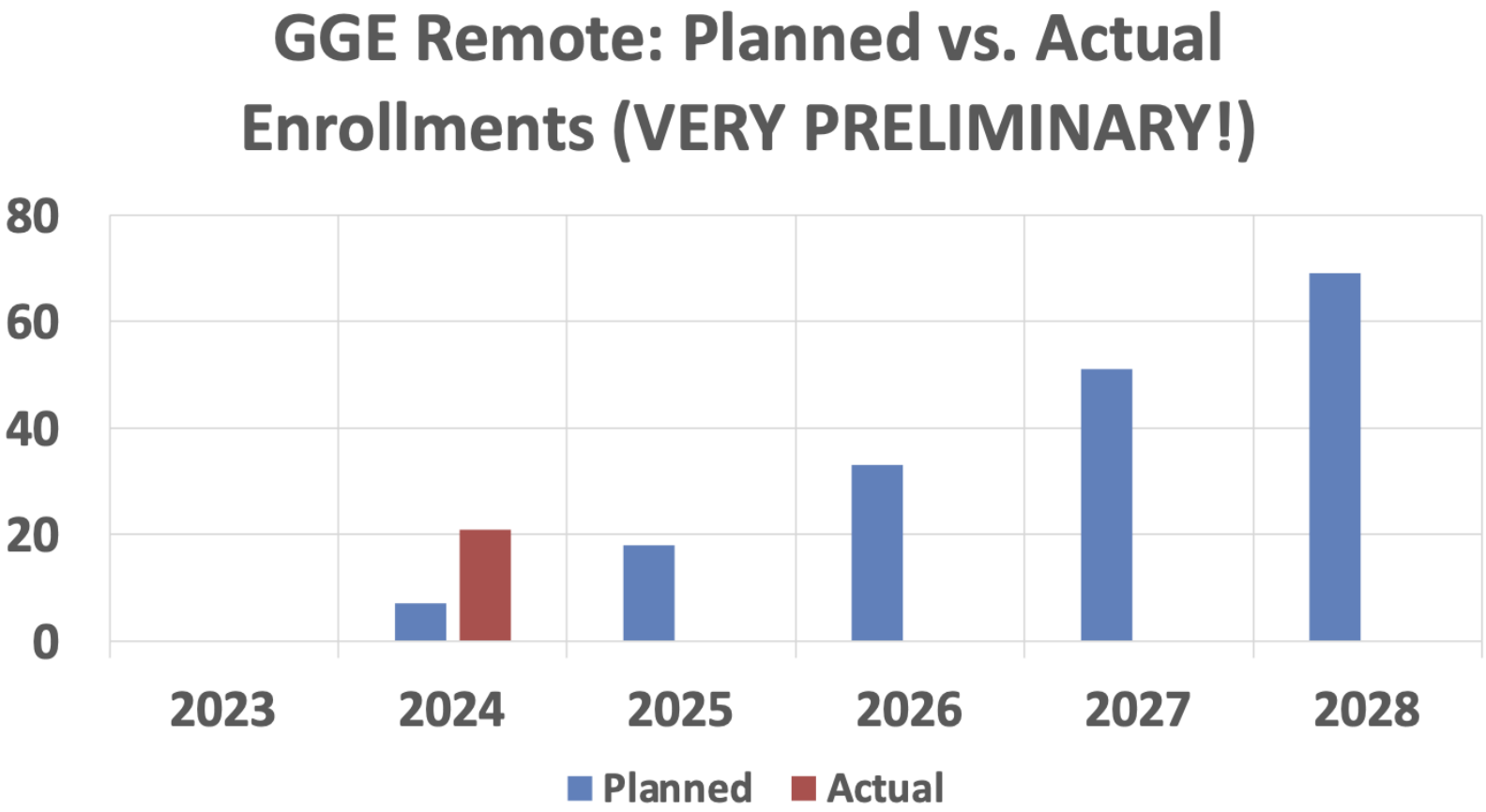
Flexibility is mandatory

Resourcing is needed for sustainability

There should always be an in-person option



How is it going?



Don’t Take My Word for It…

My abbreviated testimonial as a remote student … juggling a full-time career and family with young kids: UNB's adaptability and ingenuity to deliver their GGE courses virtually was a total game changer. My gratitude is immeasurable!

As a working professional who had responsibilities and needed to stay involved in day to day during my tenure, I wouldn’t have been able to complete the program if it wasn’t offered remotely. Props to the GGE department to their hard work involved in coordinating this program … Well done!

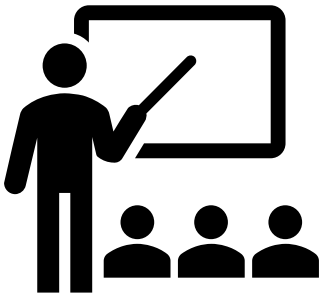
Flexibility and support was second to none!

GGE Remote Article

6. The Future

Making it Work (Forever)

Professor Workload

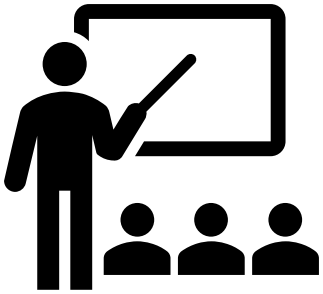


GGE Regular 100%

+ 2 Profs

GGE Remote 130%

TA Workload

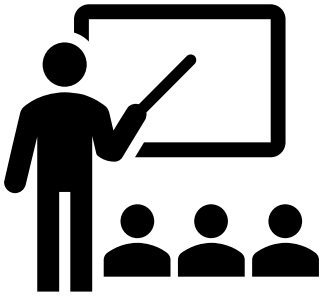


GGE Regular 100%

+ 10 TAs

GGE Remote 170%

Staff Workload



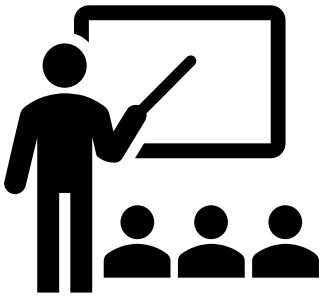
GGE Regular 100%

+ 1 Staff

GGE Remote 115%

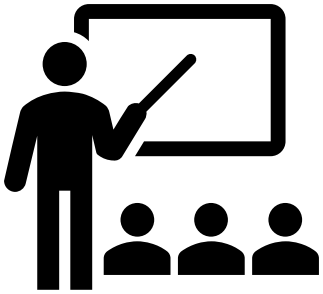
Making it Work (Forever)

Professor Complement



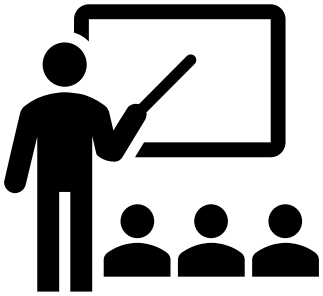
1. “New Technologies in Land Surveying”
2. “Land Administration”*

TA Complement



5 TAs per Prof = 10 TAs

Staff Complement



1 Staff Position: GGE Remote + Recruitment + Industry Liaison

The Future and You?

Professional Development Opportunities
College Transfer Agreements

Enrollments = Resources: Promote the profession!

Industry Partners (17 this year)

Cadastral Studies Chair
A position responsive to you?

What do you think?

More Information

UNB