

Minutes

Attendance (emails of voting members provided):

Sanja Boskovic	BCIT	
Andrea Frisque	BCIT	andrea_frisque@bcit.ca
Peter Burrage	Camosun College	
Susan Chen	Camosun College	chen@camosun.ca
Amir Amiraslani	Capilano University	amirhosseinamiraslan@capilanou.ca
Regan Sibbald	Coast Mountain College	rsibbald@coastmountaincollege.ca
Barbara Rudecki	College of New Caledonia	rudecki@cnc.bc.ca
No representative	College of the Rockies	
Tara Todoruk	Columbia College	ttodoruk@columbiacollege.ca
Jennifer Kirkey	Douglas College	
Allan Majdanac	Douglas College	majdanaca@douglascollege.ca
Michael Poon	Kwantlen Polytechnic	michael.poon@kpu.ca
Csilla Tamas	Langara College	ctamas@langara.ca
No representative	Northern Lights College	
Dennis Lightfoot	North Island College	dlightfoot@nic.bc.ca
Ken Langeduk	Okanagan College	klangedyk@okanagan.bc.ca
Adesola Olufade	Selkirk College	aolufade@selkirk.ca
Michael Sjoerdsma	Simon Fraser University	mhs@sfu.ca
Varda Khurshid	Thompson Rivers University	
Zeinab Teimoori	Thompson Rivers University	zteimoori@tru.ca
Arnold Sikkema	Trinity Western University	arnold.sikkema@twu.ca
Patti Ostrikkoff	UBC Okanagan	
Rudolf Seethaler	UBC Okanagan	rudolf.seethaler@ubc.ca
Carol Jager	UBC Vancouver	carolj@apsc.ubc.ca
Helen May	UBC Vancouver	
Trevor Beugeling	University of the Fraser Valley	trevor.beugeling@ufv.ca
Peter Muhern	University of the Fraser Valley	
Mauricio Dziedzic	University of Northern BC	mauricio.dziedzic@unbc.ca
Natalie Linklater	University of Northern BC	
Lillanne Jackson	University of Victoria	engradu@uvic.ca
Nafiseh Tohidi	Vancouver Community College	ntohidi@vcc.ca
Brian Dick	Vancouver Island University	brian.dick@viu.ca

Guests:

Jennifer Kook

BCCAT

1. Online platform opens (coffee and chat time)
2. Meeting procedures, agenda and introductions

Opening remarks from Dr. Deborah Roberts

Opening remarks from Elder Bibiyan Francis

Approval of agenda

Move –

Second - Lillan

Approved

Approval of minutes

Move - Brian

Second - Barbra

Approved

3. Reports and updates

- a. BCCAT – Jennifer Kook

Jennifer Kook gave a brief update on upcoming events. JAM is Nov 6 and 7 and is a hybrid conference.

She discussed reports that are available through BCCAT and talked about TCS pathways. This is a pilot project that looks at program to program articulation, the tool is being piloted this summer. Jennifer discussed a project with ONCAT. They would like to use our technology as they don't articulate in the same way as BCCAT. Jennifer is working with TRU on BC credit bank and discussions were had about where transfer credit information is found in tool.

- b. Student Persistence Study – Michael Sjoerdsma & Brian Dick

With support of BCCAT Michael and Brian developed a survey instrument to tests how the demographic changes from 1st yr to 4th yr in Engineering programs. There is some worry about retention and attrition. They also developed pilot surveys that were sent out to some institutions. Survey questions were intended to broadly measure a student's profile. The surveys were voluntary and anonymous. Questions of identity were not answered widely; possible survey fatigue could be a factor. The average age of sending schools is 21 and it shows transfer students less are less likely to start right after HS.

Things being looked for:

- level of stress students feels based on 2023/2024 surveys. Can be differences when students go into a degree ranking institution.
- changes in mental health

Next steps:

- Consistent survey instrument for actual comparison.

- Analyze data to suggest groups that may be experiencing barriers to success.
- If schools are interested in participating or providing feedback, contact Brian Dick and Michael Sjoerdsma.

Discussion was had about this study:

- Focusing on external factors beyond curriculum.
- Programs should be doing program evaluations on their own as Curriculum issues are not in scope of what is trying to be done.

Discussion was had about students doing mental health checks and assessing times

Slides will be sent out to share with the group

4. Institutional reports – Receiving institutions

a. **Simon Fraser University** - Michael Sjoerdsma

- SFU has three Engineering schools
- Internal things, continuation GPA was slightly higher previously. Trying to avoid situations where students are forced to transfer out.
- All programs have mandatory co-op.
- Mechatronics course changed requirements last year, will other 2 schools get on board with something similar?
- Has 1st yr common core agreement
- Bridging course for students that don't have mechatronics course planned to be in place for foreseeable future.

b. **Thompson Rivers University**

Programs offered:

- Engineering Transfer Programs
- BEng Software engineering
 - o 5-year stream.
 - o Gain modern knowledge
 - o Experiential learning
 - o Co-op programs
 - o Capstone project
- BEng Computer engineering
 - o 5-year stream
 - o Hands on
 - o Experiential learning
 - o Capstone projects
- Continuing to accept transfer students
- Many student achievements were highlighted.
- Mandatory workshops – tools for change
- Peer mentor program available to supports 1st year students

Discussion about 5-year programs was had as most programs offer 4-year programs. The 4-year streams have very heavy curriculum and may be beneficial to spread over 5-years. Two standard

pathways through programs; eight academic terms or nine academic terms. Nine terms would be the standard schedule; eight terms would be the intensive schedule. Seventy-five % never complete intensive schedule. UNBC does a 4-year and 5-year stream. Some students start at 4 year and change to 5.

c. UBC Okanagan

- UBC shared accreditation report. They are still growing and accepting 450 – 500 students every year.
- Mechanical engineering gets most students.

Other Engineering programs offered:

- o Electrical engineering
- o Civil engineering
- o Computer engineering
- o Manufacturing (on hold, uptake not as hoped)
- o Mechanical.
- Transfer programs with Okanagan and Camosun.
- First intake of students come September
- International students are low. Getting additional students
- Started WorkDay program to help students navigate through their degrees.
- Advisors have joined the academic and career development team at UBC Okanagan campus.
- Senior leadership changes coming.
- Discussion about common first year curriculum was had
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Institutional reports – Receiving institutions continued

d. UBC Vancouver

- Domestic applications are rating higher.
- Provincial transfer system is a good opportunity for students
- Not filling quota for 2nd year transfer students
- Nine programs had accreditation visit
- Admissions pieces: getting use to new application system
- Being more proactive about transfer credits.
- Maintaining 3.1 GPA
- 1st year program unchanged

Discussion was had about certain number of spaces starting at 1st year, spaces will move through to second year. Fifty seat overload per year.

e. University of Northern BC

- Newer programs are Environmental engineering and Civil engineering.
- 143 students between both programs
- Starting to add more electives
- Has an Industry Advisory Board which gives strong connection to the industry
- A lot of demand for our graduates. Our students have had multiple job offers

- Industry sponsors for capstone projects
- Stated social media to advertise to local student body.
- Actively looking for more students and to find way to engage high school students
- Annual Highschool Design competition has been successful and offers students a tuition waiver
- Thirteen active students are transfer students. Seven students are doing well, two are struggling and the rest are doing ok.
- Guaranteed entry for students with good academic standing.
- Both programs have large interest by industry
- Largest cohort is Civil, but all grads are receiving a job.

Discussion was had about students being employable in our industry. Some of our 1st years students are receiving summer jobs.

f. University of Victoria

Programs offered:

- Biomedical engineering
- Civil engineering
- Computer engineering
- Electrical engineering
- Mechanical engineering
- Software engineering.
- All programs do four work terms
- Eight terms is the intensive schedule
- In the process of creating a schedule with nine terms.
- Curriculum changes
 - Bachelor of Software – ENGR 141(1.5) is no longer program requirement. This is a positive change for transfer programs.
 - Need Physics one and two but not three. Physics two will fill in natural science requirement in the program.
- Changes: Two new buildings being built for Civil program and High Bay
- Applications: Year one admissions are up.
- Most transfer students are coming from Camosun and Thompson
- Deposits for international students are much larger than they used to be.

g. BCIT

- Just joined education planner BC last year.
- Four accredited programs:
 - Electrical engineering
 - Mechanical engineering
 - Civil engineering
 - Mining.

- Not receiving nor sending student
- Just under 100 students graduating.
- Strategic plan is student focused.
- Have empty spots in 2nd year
- More students wanting into degree pathway.
- After 2nd year students can grad with a technology diploma, not all can go on to an engineering program as seats are limited
- Started looking at courses and what the common core entails
- Start engaging with BCCAT course system.

Discussion had about students not being transferable with BCIT. Hoping to see that change. Seeing students compete doesn't seem very collaborative.

5. Reports and updates

a. CFYEC – Brian Dick; Patti Ostrikoff

- Owned by engineering articulation committee – report back to committee annually
- Working on improving efficiency at sending institutions and improving student learning
- Worked through updates this past year. Camosun has been added to signature page.
- SFU appendix has been adjusted to include the MSE curriculum
- UVIC appendix has been adjusted to be more strongly aligned to the common curriculum.
- BCCAT pathways project is on-going.
- Reflection of pathway requirements and Clarifying pathways
- Re-evaluated core CFYEC course curriculum
- There is no impact on the Sept-Dec curriculum. Possible flexibility added to Jan-Apr curriculum.
- Wanting to update website (UBCO) for transfer pathways.
- Tara proposed coming up with one name for the common first year curriculum program name too make it easier for students. A discussion about the proposed change was had.
 - o Issues might arise with having a common first name since most program have different names.
 - o It would be hard to change degree and certificates names and would have to go through governance.
 - o Some institutions might be resistant to changing names with years of marketing behind current names.
- Working on sub agreements with CFYEC
- Changes to the main parts of the agreement should be collected and discussed.
- Not changing integrity of agreement, just lay it out to be more understandable.
- Trying to stop smaller agreements, the more flexibility provided to students the better.
- Would like to see transfer pathways laid out better on institutional websites.
- Wonder if agreement needs a public facing website. Look into getting a webpage or link on BCCAT. Bring forward to BCCAT to see if they can help facilitate this.

- Should have every sending/receiving institution documented as we should be able to see everyone involved
- **Action item** – sending school to have statement whether programs are in alignment with CFYEC
- Engineering Degree granting institutions - ED Planner
- Look into being able to house agreement on BCCAT website

Institutional reports – Sending institutions

(in alphabetical order)

Camosun College

- Became signatory to common core agreement.
- Weakest year – only half students passing math courses.
- Coming year enrollment looks good, have program filled.
- Institutional changes in the school of STEM with engineering bridge program
- In 2021, changed all 4 credit courses to 3.
- Bridge program going through renewal
- Going through external review, renewal in fall.
- Streamlining the number of courses as they best can.

Capilano

- There has been a 66% decline in international students.
- Have a healthy number of domestic applications.
- Has established an advisory committee. Assisting in development of credentials.
- On top of existing micro credentials, now in the last process of developing new macro credential.
- Hoping to design and offer new courses

Coast Mountain

- Has not been able to get enough students the past couple year.
- Haven't offered design courses in 2 years.
- Reduced engineering learning pathway to courses that typically run.
- Had to reduce program cause administration is taking it off of the website.
- Hopefully pathway students can still move on.
- Putting forward a 2-year diploma that will start at easier levels as students are having difficulty handling 1st year curriculum coming out of high school.

College of New Caledonia

- Offering engineering transfer program
- College is changing the number of schools from 4 to 3. All related to difficulties with budgets and reduction in international students.
- Some programs are being cancelled all together.
- Engineering is staying and has had the same intake last year. 8 students.
- Actively promoting the program and hoping for bigger intake next year.
- Going through the process of changing the name of the program.

Columbia College

- Not part of CFYEC.
- In the process of getting internal curriculum committee to approve everything to sign on
- Enrollment is on a decline and Engineering numbers are low.

Douglas College

- Revised 2nd year engineering diploma courses.

Kwantlen Polytech

- Two-year diploma was implemented in September. Does not include preparatory courses.
- Program review of 1 year certificate coming up.
- Issue coming up with having the last day to withdrawal from classes on the last day of class. Some students are dropping out at the very end leaving other students hanging on year end projects.
- Thinking about have 2 types of projects. Group projects for students with 60% or more, individual project for under 60%.

Langara

- Two programs. Both satisfy CFYEC.
- Total of 64 students.
- Application numbers are increasing.
- Have a lot of students on the waitlist.
- Pushing work integrated learning.
- Letting students connect with companies to help find work.
- Low international numbers.
- Aiming to foster more interdisciplinary connections.
- Not able to make big changes to curriculum.

Okanagan College

- No changes in last year and no changes are planned for the near future.
- Only getting around 16 students and only around 8 are graduating.
- Trying to Promote program.
- Have ten new 3D printers.

North Island College

- Had a good year.
- First ever class that is over 50% women and they have been more successful then the men.
- First semester design project is working with clients involved in agriculture.
- Have a one-day field trip for the whole class. Went to Denman and had lunch with clients. It was a good way to start the year and build community.
- Applications are up 50% over last year.
- Continng to offer common first year curriculum.
- Most students hoping to transfer to UVIC.
- Not as reliant on international students so program is doing well.

Selkirk College

- Have seen an increase in enrollment this year by about 50%.

- Engaging with the community and local high schools.
- Had the opportunity to see complex engineering systems.
- Have 20 students admitted for next year.

Trinity Western

- Does not have a common first year core agreement,
- No design courses available.
- Have a formal agreement with UVIC, expired in March, but renewing.
- Have around a dozen students at beginning of year, 1/3rd change programs, 1/3rd transfer, 1/3rd drop harder courses.
- Had an opportunity for students to meet engineers in November. It was well attended.

University of Fraser Valley

- Enrollment is slowly recovering from COVID
- Attrition is a bit of an issue. Roughly 48 students admitted but was down to half by the end.
- Only 11 students finished common course courses for UBC transfer.
- Math department did statistical analysis – students that came in with B+ average did well, students below a B+ are struggling.
- Considering changes to way we are scheduling programs.
- Looking at having standard 1 year but having 2-year option as well.
- Students are willing to take courses in the condensed may June semester.
- Making changes to the curriculum courses to reduce the number of credits over the program
This aims to make the program more cost effective for students.

Vancouver Community College

- Has an agreement with SFU.
- Offering engineering graphic design.

Vancouver Island University

- Labour market round table in the Fall is part of design course.
- Invite people from the community to chat about different employers.
- Has a Program Advisory committee.
- Co-op has been relatively strong, especially 1st year. Usually get about 10ish students that get co-op's that count toward UVIC credit.
- One change with co-op, it used to be run by a department but is now up to facilities to organize.
- Attrition around 20 – 25%.
- Have seen challenges with Math courses
- Students did well with projects this year.
- Seeing more students starting at a receiving school.
- Transfer credits are not given until received.
- Issues on seat management.

6. Wrap-up and Adjournment

4:00pm

a. Committee election – Co-Chair

Three-year term is up but the current Co-Chair is willing to stay on unless someone else would like to take over.

Duties:

- Participated in scheduling process and organization process.
- Allan Susan and Trevor were nominated as Co-Chair. Allan accepted, others did not accept.
- Allan will be starting as Co-Chair in 2026 and will be Chair for 2027

b. **Dates and Location of 2026 & 2027 meetings**

Next year the meeting will be held at UBCO and OC in Kelowna on May 7, 2026 and May 6 in 2027 for both Physics and Engineering

Roundtable:

Discussed the length of Engineering programs – Should 5-year option be offered over 3 semesters for 1st years?

- Starting in January is difficult and would extend the degree.
- Should a standard and intensive schedule be offered? Might be possible to do a later admission cycle.
- Should a pre -engineering course or engineering foundations course be offered?

Discussion was had about Chat-GPT

- Many students using it students using it in ways that are not allowed.
- Picking topics that are very specific, and it is easier to spot the AI.
- Suggestions on way to get students to not use AI:
 - Sketches
 - Taking pictures of objects and sending them to instructor.