

Engineering Articulation Minutes - 2019

Location: UBC – Okanagan (Kelowna Campus), Rm EME 2111

Date: 02.May.2019 (Thursday)

Time: 9:30am – 4:30pm

Voting PSI Attendees

Institution	Name	E-mail
<i>BCIT</i>	Renata Wood	rwood76@bcit.ca
<i>Camosun College</i>	George Ballinger	Ballinger@camosun.bc.ca
Capilano University	Winton Li	wintonli@capilanou.ca
<i>Coast Mountain College</i>	Regan Sibbald	RSibbald@coastmountaincollege.ca
<i>College of New Caledonia</i>	Barbara Rudecki	rudecki@cnc.bc.ca
<i>College of the Rockies</i>	Trevor Beugeling	TBeugeling@cotr.bc.ca
<i>Columbia College</i>	Tara Todoruk	ttodoruk@columbiacollege.ca
<i>Douglas College</i>	Allan Majdanac	majdanaca@douglascollege.ca
<i>Kwantlen Polytechnic</i>	Michael Poon	michael.poon@kpu.ca
<i>Langara College</i>	Csilla Tamas	ctamas@langara.ca
Northern Lights College	Lisa Verbisky	lverbisky@nlc.bc.ca
<i>North Island College</i>	Dennis Lightfoot	Dennis.Lightfoot@nic.bc.ca
<i>Okanagan College</i>	Ken Langedyk	klangedyk@okanagan.bc.ca
<i>SFU</i>	Jan Castro	fas_recruitment@sfu.ca
Selkirk College*	Elroy Switlishoff	elroys@telus.net
<i>Thompson Rivers University</i>	Faheem Ahmed	Fahmed@tru.ca
<i>Trinity Western University</i>	Herbert Tsang	herberttsang.twu@gmail.com
<i>UBC – Okanagan</i>	Yang Cao	yang.cao@ubc.ca
<i>UBC - Vancouver</i>	Carol Jaeger	carolj@apsc.ubc.ca
<i>University of Victoria</i>	LeAnne Jackson	engradu@uvic.ca
University of the Fraser Valley	Peter Mulhern	Peter.Mulhern@ufv.ca
<i>University of Northern BC</i>	Steve Helle	Steve.Helle@unbc.ca
<i>Vancouver Community College</i>	Costa Karavas	ckaravas@vcc.ca
<i>Vancouver Island University</i>	Brian Dick (Chair)	brian.dick@viu.ca
<i>Yukon College</i>	Jacklyn Semple	jsemple@yukoncollege.yk.ca

Non-Voting PSI Attendees

Institution	Name	E-mail
BCIT	Brent Dunn	brent_dunn@bcit.ca
Camosun College	Tim Ayers	ayers@camosun.bc.ca
Douglas College	Jennifer Kirkey	kirkeyj@douglascollege.ca
UBC – Okanagan	Megan Lochhead	megan.lochhead@ubc.ca
UBC - Vancouver	Mary Murphy	murphy@apsc.ubc.ca
University of the Fraser Valley	Lin Long	Lin.Long@ufv.ca

Guests

Institution	Name	E-mail
ASTTBC	Barry Brooks	bbrooks@asttbc.org
BCCAT	Fiona McQuarrie	fmcquarrie@bccat.ca
BC Campus	Brian Case	bcase@bccampus.ca

*The Chair thanks Elroy Switlshoff for providing notes to aid in the preparation of these minutes.

0. Meeting called to order at 10:00am

1. Welcome and introductions

Brian Dick welcomed everyone and called the meeting to order. New code of conduct for articulation committees highlighted.

Territorial acknowledgement: *We acknowledge the traditional territories of the Sylix peoples on whose lands we are meeting today*

2. Welcome from UBC - Okanagan

Yang Cao welcomed the articulation members. UBC-O is happy to be hosting and is excited to share details on the new Manufacturing Engineering Program starting in Sept-2019.

A round table of introductions followed. All present introduced themselves and provided some brief information about the institutions they represent. Attending guests from ASTTBC, BC Campus, and BCCAT were introduced

3. Approval of Agenda / Minutes

No additions to the agenda were proposed. Motion carried for approval of the agenda; motion carried for approval of the minutes.

4. Agency Updates

The guests of the meeting provided a brief update to the articulation members.

Fiona McQuarrie (BCCAT)

Course articulation list circulated. Provided a summary of the spring update (provided in the meeting package).

Transfer Innovation Funding being suspended for one year to evaluate how best to move forward. Although Engineering Common Core Initiative has been successful, many have not been and a re-think is required.

Brian Case (BC Campus)

Provided a summary of who BC Campus is, and what initiatives are currently underway. Open Stax continues to be a focus as it provides considerable savings to students. Jennifer Kirkey indicates that the Physics Open Stax has been used at Douglas College, and the Astronomy text is being promoted.

Carol Jaeger indicated that UBC MATH has gone textbook free (all years), while the first-year engineering design curriculum (APSC 100/101) are also text-book free.

Barry Brooks (ASTTBC)

Described the role of ASTTBC, and provided an overview of changes taking place due to the new Professional Governance Practices legislation. Outcome of this change is uncertain.

5. Primarily Sending Institution Updates

The chair requested that if institutions find something that works well with students to please share (and highlight) in reports.

Full details for each institution can be found in the submitted reports attached to these minutes.

Camosun

- Full program, but no wait list (down 25% from last year applications)
- Scheduled study rooms once a week.
- Engineering focussed linear algebra; CPSC curriculum
- Bridge program expanded from 26 to 32 students

Capilano

- One year program; project based courses (APSC 130 & 140)
- Developing a course with a year-long project (UVic indicated they split into two courses – one design based, one implementation based)

Coast Mountain College

- Eight to 10 students transferring, about half are international.
- Open textbooks are used as often as possible.

College of New Caledonia

- Overall student numbers are down; international counts increasing, domestic counts decreasing.

Columbia

- No design courses (yet); no P.Eng, or otherwise licensed instructor

College of the Rockies

- Stable numbers; 11 in the Fall, 9 in the winter.
- Merging APSC courses into one course to align with common core.
- Looking to develop CPSC course
- Indigenization of courses is a focus; improving access for indigenous students (BC Campus has resources / guides)

Douglas College

- Numbers are stable; Fabrication courses are being offered, but have not been easy to sell

KPU

- 50 to 54 students, but numbers are down this year; 40% attrition from first to second term.

Langara

- Student quality is down; less than 40% achieved the minimum 2.8 GPA upon completion. Student stress is up.

Northern Lights

- Student numbers increasing, but still low numbers (new program); three last year, five applications for the coming year.

North Island College

- Reduced numbers; lower quality; higher attrition
- Second design course had only five students
- CPSC using Java, but C to be integrated.

Okanagan College

- Enrolment down last year; High deposit is not apparently impacting number of 'no shows'

Selkirk

- Investment in new labs - \$19 million. Looking at offering a second year.

TWU

- Strong computer science offerings; successful meet-and-greet with local EGBC branch.
- Most students transferring to Alberta

UFV

VCC

- Transfer program to SFU; minimum 2.75 GPA

VIU

- Numbers steady; quality down.
- International Field school to Vietnam (~1/3 of class participating)
- Local project owners for design course

Yukon College

- Small numbers; no linear algebra
- Engineering Transfer being built up

6. Tour of UBC-O Engineering Facilities

7. Major Receiving Institutions

The chair requested that if institutions find something that works well with students to please share (and highlight) in reports.

Full details for each institution can be found in the submitted reports attached to these minutes.

BCIT

- Each discipline has a difference Dean
- Course-by-course mapping for each transfer course, and may differ between discipline.
- Working to standardize practice.

SFU

- School of Sustainable Energy Engineering started
- Data suggests transfer students twice as likely to be put on academic probation as direct entry students

TRU

- Two admission streams; software engineering and engineering transfer
- Considering expanding into ECE

UBC-Okanagan

- New Manufacturing Engineering program, second year starting Sept-2019
- Electrical and Mechanical students will soon after Bio-Medical option (Sept-2020)
- Civil students will have a resilient infrastructure management option
- Transfer agreements requires minimum of a 2.8 GPA, non-agreement transfers are only slightly higher. Most transfers to UBC-O coming from Selkirk

UBC-Vancouver

- Manufacturing Engineering Program starting.
- UBC-V ran first two years of Bio-medical engineering
- Moving to an independent Environmental Engineering Program (separate from UNBC)
- Transfer program requires a 3.1 GPA, competitive entry is 3.5 to 3.7 for admission.

Part 1: Facts and Figures

1. Total number of students enrolled in direct entry 1st year program:
 - a. 802 (2017W - 508 domestic, 294 international)
 - b. 881 (2018W - 610 domestic, 271 international)
2. Total number of applications received for first year direct entry:
 - a. 6555 (2018W - 2910 domestic, 3645 international)
 - b. 6269 (2019W - 2813 domestic, 3456 international)
3. Total number of students admitted to year 2:
 - a. 218 (2017W - 126 via an engineering transfer program agreement, 92 from other sources)
 - b. 207 (2018W - 106 via an engineering transfer program agreement, 101 from other sources)
4. Engineering transfer students admitted from the following institutions with the following distribution:
 - a. 2017W (CAP - 22; CNC - 11; KWAN - 17; LANG - 28; SELK - 14; TRU - 17; UFV - 8; VIU - 9)
 - b. 2018W (CAP - 23; CNC - 4; KWAN - 17; LANG - 33; SELK - 3; TRU - 17; UFV - 5; VIU - 4)
5. Total number of applications received for year 2 entry/transfer:
 - a. 639 (2018W)
 - b. 514 (2019W)

UNBC

- Starting stand-alone Environmental Engineering and Civil Engineering programs

UVic

- Primary transfer routes are via Camosun, TRU, and VIU
- Dropping Physics 12 as an entry pre-requisite
- Pre-Calculus 12 appears to have the strongest correlation with academic success

8. Distribution List

BCCAT has arranged with KPU to offer a Moodle page available for Articulation Committees. A call-out for someone from someone with the Articulation committee to create and manage this page was made, with no volunteers.

Brian will endeavour to populate the Moodle page with the current articulation membership. Going forward, communication will shift to this medium to aid in list management.

9. Committee Governance

Brian Dick will be completing his four-year term as chair after the 2020 meeting. Suggested that Michael Poon from Kwantlen take up a vice-chair role over 2019/20, rolling into the chair's position after the 2020 meeting.

10. Update on Engineering Common Curriculum Project

- General history of the project from inception to current state.
- UBC (both Okanagan and Vancouver), UNBC, and UVic have agreed to the common curriculum terms. TRU and SFU are still in discussion. Curriculum content included in the published report (also provide as part of the articulation package)
- Government has provided some curriculum development funding (through BC Campus) for the 2019/20 academic year to support the common curriculum
- Steering committee formed including Brian Dick, Yang Cao, Dennis Lightfoot, Winston Li, and Tim Ayers

- Call for applications for capacity building funds, with approvals to be provided in time for allocating workloads in the 2019/20 academic year.
- Institutions requesting capacity building funds will have to agree to the common curriculum terms, as well as endeavour to offer the classes starting 2020/21. Terms include: P.Eng or Eng. L instructors for design courses, creating an engineering transfer credential, creating/aligning to the common curriculum content
- Shareable teaching / learning resources to be provided through the Articulation Moodle Site (to developed).

11. Location of upcoming meetings.

BCIT has agreed to host the 2020 Articulation Meeting while KPU will host the Physics Articulation meeting. Dates for the meeting to be: 30 Apr / 01 May (respectively).

After a call for volunteers for 2021, Coast Mountain College put their name forth as a possibility. This meeting location to be confirmed at the 2020 Articulation Meeting.

12. Adjournment

Meeting was adjourned at 4:30 PM.