## BCCAT

# Credits to Graduation

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This newsletter presents the executive summary for the full project report. Both publications are available at bccat.ca/search/publications

The number of credits completed to earn a baccalaureate degree continues to be an important criterion for measuring the effectiveness and efficiency of transfer between post-secondary institutions. Many undergraduates – both transfer and direct entry students – complete more than 120 credits needed for a "traditional" degree. The current study aims to compare the total number of credits completed for a baccalaureate degree by 2015/16 direct entry and transfer graduates at several large public universities in BC.

The following universities provided their data for the study: Simon Fraser University (SFU), Thompson Rivers University (TRU), the University of British Columbia both Okanagan (UBC-O) and Vancouver (UBC-V) campuses, the University of the Fraser Valley (UFV), the University of Northern British Columbia (UNBC), and the University of Victoria (UVic). This study combined the number of credits in the institutional data from the receiving universities with the number of credits the students obtained at "high volume" sending institutions, available through the province-wide Student Transitions Project (STP) dataset. To minimize the complexity of nowadays transfer pathways, transfer students were only included if they transferred credits from **one** Study Sender only.

### Study Senders and Receiving Universities

The students from the Study Senders institutions constituted a significant portion of all 2015/16 graduates from SFU, UBC, UNBC and UVic. The number of transfer students in Table 1 is shown as identified in the STP data. Overall, transfer students constituted 12% of the students in the study cohort.

TABLE 1: 2015/16 Graduates by Receiving University and basis of admission (within the study scope)

	SFU	TRU	UBC-O	UBC-V	UFV	UNBC	UVic	Total	Total %
Direct Entry	1,571	200	653	3,381	497	226	890	7,418	88%
Transfer	310	9	120	265	17	72	255	1,048	12%
Total	1,881	209	773	3,646	514	298	1,145	8,466	100%
% in Pathways	16%	4%	16%	7%	3%	24%	22%	12%	

NOTE: The transfer student numbers in this table are lower than the total number of transfer students at each receiving university, because the table only shows the transfer students in the cohort for this study.

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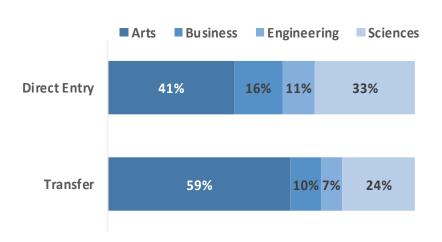
It was surprising to see the relatively small number of transfer students in the cohorts from TRU and UFV (Table 2). A larger number of transfer students in some pathways (e.g., from CMC to UNBC, or from Selkirk College) had also been expected. It was possible, however, that some transfer graduates may have been excluded from the cohort because they transferred credits from several institutions.

TABLE 2: The number of transfer students by Study Sender and Receiving University

Study Sender	SFU	TRU	UBC-O	UBC-V	UFV	UNBC	UVic	Total
Camosun College							255	255
Coast Mountain College						6		6
College of New Caledonia		1				66		67
Douglas College	181		1	35	14			231
Langara College	129		9	205	3			346
Okanagan College		4	99	6				109
Selkirk College		4	3	3				10
Thompson Rivers University			8	16				24
Total	310	9	120	265	17	72	255	1,048

## What degrees did the students graduate with?

59% of transfer students graduated from Arts programs. The proportion of direct entry students was smaller: 41% of direct entry students graduated with a BA degree. By comparison, only 24% of the transfer student cohort graduated from Sciences programs, while 33% of direct entry students graduated in Sciences.



### The cohort profile details

About 12% of the direct entry cohort and 8% the transfer student cohort were international students. About 65% of transfer students with a known high school graduation date registered in post-secondary programs at a CDW institution within one year of high school graduation.

About 40% of transfer students (393 students) received one or several credentials from an institution contributing to the BC Central Data Warehouse (CDW) in addition to a baccalaureate from their receiving university (Table 3). Transfer students graduating with an Arts degree were slightly more likely to have received a credential from a CDW institution (59% of all transfer students, 63% of CDW credentials). Almost half of all CDW credentials were associate degrees (44% of all credentials) followed by diplomas (32%).

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Table 3: Credential received (by 393 transfer students) at CDW institutions by credential type and university program area

	University Program Area						
CDW Credential Category	Arts	Business	Engineering	Sciences	Total	% Total	
ADVANCED DIPLOMA			17		17	4%	
ASSOCIATE DEGREE	152	5	2	41	200	44%	
CERTIFICATE	28	6	7	6	47	10%	
DEVELOPMENTAL CREDENTIAL	17	11		8	36	8%	
DIPLOMA	84	17	18	26	145	32%	
POST-DEGREE CERTIFICATE	1				1	0%	
SHORT CERTIFICATE	1			3	4	1%	
Total	283	39	44	84	450	100%	
% Total	63%	9%	10%	19%	100%		

## How many credits are required for a degree?

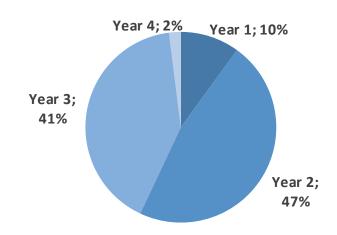
Overall, 81% of the cohort graduated with degrees requiring 120 or 121 credits in Arts, Business and Sciences. Baccalaureate degrees in Engineering required the highest number of credits for completion (143 – 177 credits), followed by Sciences programs (120 – 147 credits). Arts and Business degrees typically required 120 or 121 credits, with Honours or Combined Honours degrees requiring 132 credits.

# Arts 120 132 Business 120 132 Engineering 143 177 Sciences 120 147

Range of Credits Required for a Degree

## The year level of admission for transfer students

Almost half of transfer students (47%, 493 students) were admitted to the third year of baccalaureate studies. Another 41% (428 students) were admitted to the second year. In addition, 10% of transfer students were admitted to the first year, and a small number of UFV, UNBC, and UVic transfer students were admitted to the fourth year of baccalaureate studies. For most receiving universities, a higher year level of admission for transfer students resulted on average in more accumulated credits.



### Attempted credits vs. earned credits

This study attempted to assess both the number of credits attempted (i.e., credits from all courses, even if a student failed or withdrew from a course) and earned credits (credits obtained when a course is completed). For all direct entry and transfer students, the average difference between attempted and earned credits at a receiving university ranged from 4.1 (in Business programs) to 7.9 credits (in Engineering). The program and overall average difference (of attempted and earned credits) between transfer and direct entry students was marginal, which implies that transfer students perform as well as direct entry students in university courses.

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## The total number of credits obtained by baccalaureate graduates

When including credits from all known sources, transfer students on average completed nine more credits on their way to a baccalaureate than did direct entry students. The difference was greater for students in Engineering, Business and Sciences programs (representing a full 1 to 2+ semesters of credit). For Arts programs, the difference ranged from one to two 3-credit courses.

The results indicate that a variety of factors influenced the number of credits students obtained. These factors include the program area; Engineering degrees typically require more credits to graduate than, for example, Arts or Business degrees. Another factor was the credentials received in addition to the bachelor's degrees, prior or during baccalaureate studies. While transfer students obtained overall slightly more credits than direct entry students, it appears that transfer pathways into Arts and Business degrees are more aligned than similar pathways in Sciences and Engineering.

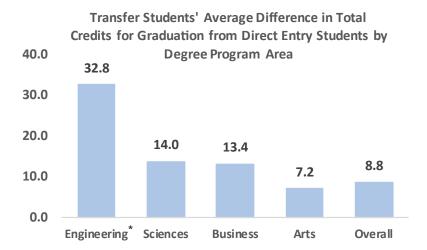


TABLE 4: The overall average number of credits by basis of admission and program area

Program Area	Direct Entry	Transfer		
Arts	128.8	136.1		
Business	129.7	143.1		
Engineering*	168.4	201.2		
Sciences	137.7	151.8		
Overall	136.1	144.9		

Note: Numbers may not add up due to rounding.

### *Program match pre- and post-transfer*

While students who transferred between the same program were much more efficient in their use of credits in some program areas (e.g., in Business), about three-fourths (73%) of transfer students studied in such pre-transfer programs as "General Arts", "General Studies", or "University Transfer". Such broad pre-transfer program categories could not be associated with a specific post-transfer discipline at a university. Only 17% of transfer students (178 students of 1,048 total) had the same CIP (Classification of Instructional Programs) code at their CDW institution and at their receiving university, thus making it difficult to empirically test the assumption that transfer between related programs was more efficient for students.

#### Conclusion

Transfer in BC does not appear to add significant barriers on the pathway to a bachelor's degree: transfer students from the Study Senders performed well. While they graduated with a somewhat higher number of credits than the direct entry students, the overall small difference reflects a high alignment of articulated courses. The finding that both transfer and direct entry students completed somewhat more credits than required for their credential possibly reflects the exploratory nature of undergraduate studies rather than systemic inefficiencies. The findings that direct entry students earn additional credits at Study Sender institutions, and transfer students earn credentials besides bachelor's degrees confirm that students' pathways through post-secondary education are rarely linear.



<sup>\*</sup>There was significant variability in the averages of the number of credits among Engineering pathways. The overall program area average should be interpreted with caution.