



JMU Transfer Report

Transfers Through 2021-22

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Executive Summary

The contents of this report were developed to explore the performance of BRCC transfers at James Madison University. The contents were chosen by the Blue Ridge Community College General Education/Transfer Cluster Leads, led by Lynne Ryan. With the assistance of Janet Ping, student data from BRCC were matched to student data from JMU to answer important questions about the profile of students who transfer to JMU from BRCC and their success once they transition. This is the second report completed by Chris Orem and the first since 2018.

This report answers the following questions posed by the BRCC Transfer Taskforce:

Basic Information

- How many students have transferred to JMU from BRCC over the past four years?
- How many BRCC credits did these students take?
- How many graduated with an associate's degree?

Academic Performance at BRCC

- How many students transferred to JMU with a GPA above 3.0?

Academic Performance at JMU

- What was the JMU GPA earned by BRCC transfers over the past four years?
- How did Pell recipients' GPAs compare to non-Pell recipients' GPAs?

Top JMU Degrees Earned by BRCC Transfers

- What are the top degrees earned at JMU by BRCC transfers?
- What are the top degrees earned by native JMU students?
- How long did it take students to complete each program?
- How many credits, on average, did students earn?

JMU Graduation Rates and Course Performance for BRCC Transfers

- What are the two-, three-, and four-year JMU graduation rates for BRCC graduates?
- How do BRCC graduates perform in upper-level JMU courses compared to native JMU students?

Dual Enrollment Trends

Did DE students take fewer courses in their first year than non-DE students?

Did students with DE credits graduate in less time than students without DE credits?

How many DE credits did students bring in to JMU?

What DE credits were transferred in and what JMU courses did they count towards?

Executive Summary

The pipeline of transfer students to JMU from BRCC remains consistent and strong. These students are primarily associate degree-earners with strong GPAs. As a group they do well at JMU and their major interests generally align with the most popular degrees earned by native JMU students. Specific results are highlighted below and are explored more in the report.

On average, 148 BRCC students transfer to JMU annually. This figure is lower than the previous report (175 students annually). Most of these students come to JMU having first earned an associate's degree (77.2%). Seventy-seven percent of these students earned an Associate of Arts & Sciences degree.

Students who transfer to JMU tend to be strong students. Over 83% of associate degree-earners transfer to JMU having earned a GPA above 3.00 at BRCC—the average GPA was 3.44 for this group. Though lower, 75% of those who transferred without first earning an associate's degree had a GPA above 3.00 (average GPA: 3.46).

A higher percentage of transfers are earning JMU GPAs above 3.0. The percentage of transfers with a 3.0 GPA at JMU has risen from just over 50% in 2017 to 63% in 2021.

Transfer students receiving Pell do as well academically at JMU as non-Pell recipients. Fewer than half of BRCC students transferring with more than 30 credits received a Pell grant at JMU, although this percentage is well above JMU's Pell recipient percentage (approximately 15%). These students have identical JMU GPAs to students who transferred but did not receive a Pell grant.

Six of the top ten majors earned by transfer students are the same as those who started at JMU—of the majors that are the same, BRCC students tend to take between two and three years to finish. Nursing students are most efficient, taking under two years to finish. Students who transfer from

BRCC and earn degrees in these common majors tend to take a few more credits than students who start at JMU, and while the difference is small in most cases, there is opportunity to explore streamlining the transfer process.

BRCC transfers tend to finish their degrees in a timely manner although graduation rates have been declining recently. Almost 70% of BRCC transfers graduated from JMU in under four years, a trend that has been decreasing over the past four years (in the 2018 report, the trend had been increasing). Over 70% of transfers who earned an associate's degree graduated from JMU in four years or less. This trend has dropped by 10 percentage points since five years ago and explanations, which include the pandemic, should be explored.

BRCC students as a whole have comparable GPAs to native JMU students in upper-level courses. BRCC students excel in upper-level Geology and Sociology courses relative to their native JMU peers. In other areas, particularly science and business, BRCC students lag behind in GPA. Although GPA is just one factor in determining student success, it is recommended that future work focus on some of the factors that may lead to this performance gap.

BRCC Dual Enrollment students have been transferring in more credits than in the past. The average number of credits transferred in to JMU from BRCC dual enrollment courses has been increasing over the past eight years. However, DE students show no differences in the number of credits they are taking in their first year or in the time it takes them to complete a degree relative to students without any dual enrollment credits.

The remainder of this report explores in greater depth the themes highlighted above.

Most BRCC students who transfer to JMU have earned an AA&S degree

Between 2018-19 and 2021-22, 589 students transferred to JMU from Blue Ridge Community College. Over 77% of these students enter with an earned associate degree, having earned more than 45 credits at BRCC.

77.2% of students who transferred to JMU earned an associate's degree first

The majority of students earning an associate's degree prior to transferring have earned an Associate of Arts & Sciences degree. In fact, of the 455 distinct students who transferred between 2018 and 2021 after earning an associate degree, 77% were in an AA&S program.

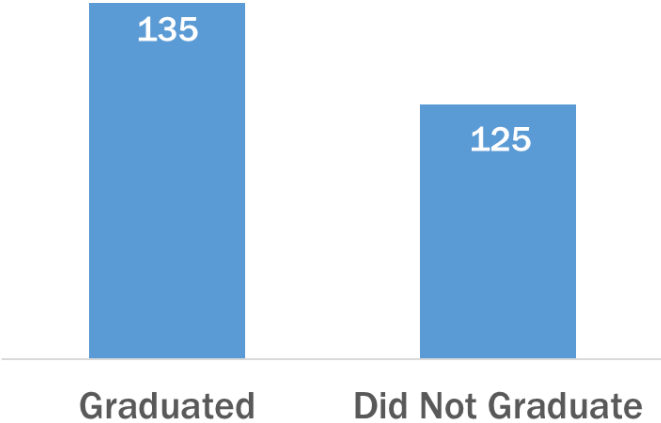
Of the 455 students who transferred after earning an associate's degree between 2018 and 2021, 77% earned an AA&S.

Students who transfer to JMU after graduating from BRCC with an associate's degree earn over twice as many credits from BRCC as students who transfer without graduating (73 vs. 34). However, the students who do not graduate from BRCC transfer to JMU with an average of 47 transfer credits. Thus, many of these students may have likely collected credits from other four-year and community colleges.

In fact, non-degree-earning BRCC transfers actually graduate from JMU with fewer overall earned credits than their counterparts. Of the students who entered JMU from 2017-18 to 2019-20, students who did not graduate from BRCC prior to transfer accumulated on average a total of 47 credits from BRCC and 78 credits from JMU). Students who graduated from BRCC did so with an average of 75 transfer credits from BRCC and earned 60 credits from JMU for a total of 135 credits (see Figure 1).

Much like the last report, these data do not consider how the credits are applied, and the sample sizes for students who did not graduate from BRCC are limited. However, if students who transfer early do so because they are somehow better at navigating the advising system, then it may be advisable to review the credits earned by degree-seekers to see where certain redundancies may be present.

Figure 1 JMU graduates who earned an associate's degree from BRCC earned more credits than students who transferred before graduating



The average BRCC GPA for associate degree-earners who transfer to JMU is 3.44.

Since 2018-19, 397 (83.2%) of BRCC transfer students who graduated with an associate's degree earned a GPA over 3.0 at Blue Ridge. The average GPA for this group is 3.44. The percentage of students who transferred before earning a degree and earned a 3.0 or higher at BRCC is lower, at 78.2% (169 of 216). This group had an average GPA of 3.46, essentially identical to the group who earned a degree before graduating.

83%

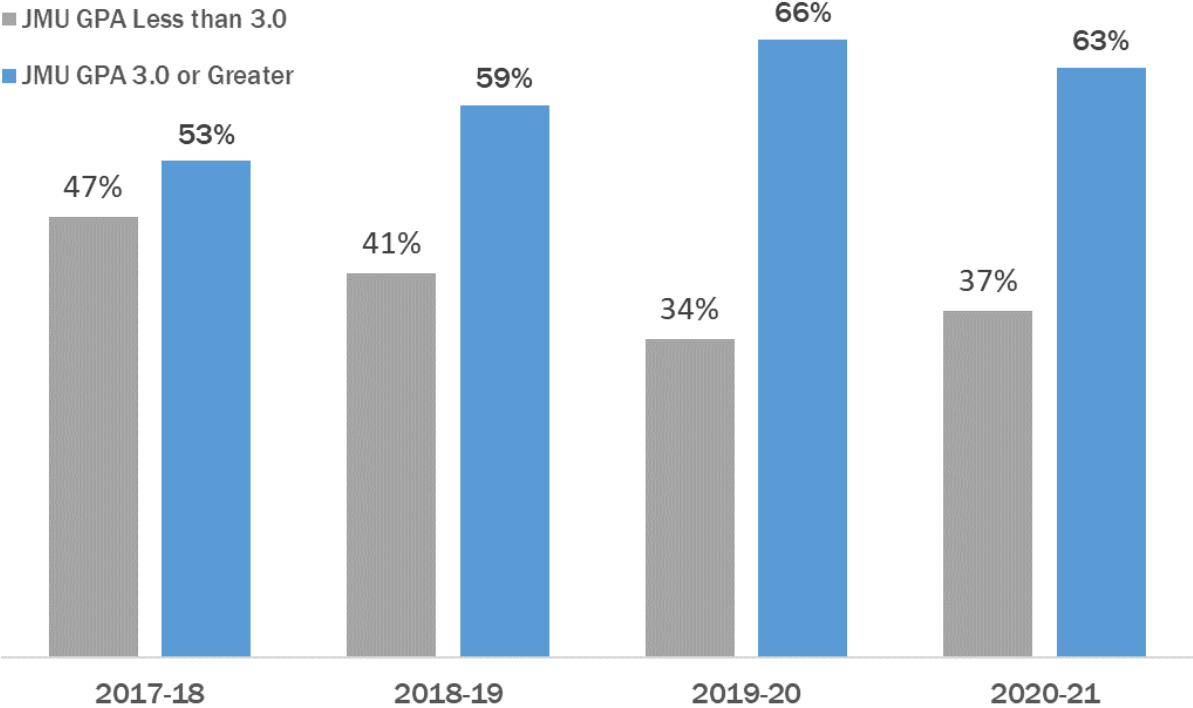
of BRCC transfer students who graduated with an associate's degree earned a GPA over 3.0

The percentage of BRCC transfers earning a JMU GPA above 3.0 has been increasing.

BRCC students who transferred to JMU since 2018-19 typically earn more than 30 credits prior to transfer. In fact, between 2018 and 2021, 91% of transfers have come with at least 30 hours earned at BRCC. For that reason, the data shown in Figure 2 only include students who transferred with more than 30 earned BRCC credits. These data also show information for all students who transferred from BRCC, regardless of major or whether or not they graduated before transferring.

As Figure 2 shows, a slight majority of BRCC students who transferred with more than 30 credits and started at JMU in 2017-18 have earned GPAs at JMU above 3.0. That percentage has grown in the years since, with 63% of BRCC transfers who started at JMU in 2020-21 earning a 3.0 GPA at JMU since. This trend, which accounts for all majors and includes both associate's degree earners and non-earners, indicates that BRCC student performance in general has improved since the last iteration of this report.

Figure 2 The rate of BRCC transfers earning GPAs above 3.0 at JMU has increased by 10 percent since 2017-18.



Transfers who receive a Pell grant do just as well as transfers who do not receive one.

Like the last analysis, when reviewing performance of Pell recipients and non-Pell recipients, only students who transferred from BRCC with 30 or more hours were included. This group included 610 of the 654 total transfers to JMU between 2017 and 2020 (93%). At the time of this report, Pell information for 2021-22 was not available. Forty-four percent (268 students) received a Pell grant of any amount at JMU. As an aside, the total percent of Pell recipients at JMU is approximately 15%, which illustrates a key demographic difference between transfer students and the overall undergraduate population at JMU.

The three-year average GPA for BRCC transfer students who received a Pell grant at JMU versus those who did not earn a GPA was 3.01 to 2.98. That is, students who transferred from BRCC performed equally well in the classroom, regardless of whether or not they received a Pell grant.

3.01

The average GPA for BRCC transfers who received a Pell grant.

The top two JMU degrees earned by BRCC students were once again in the health professions

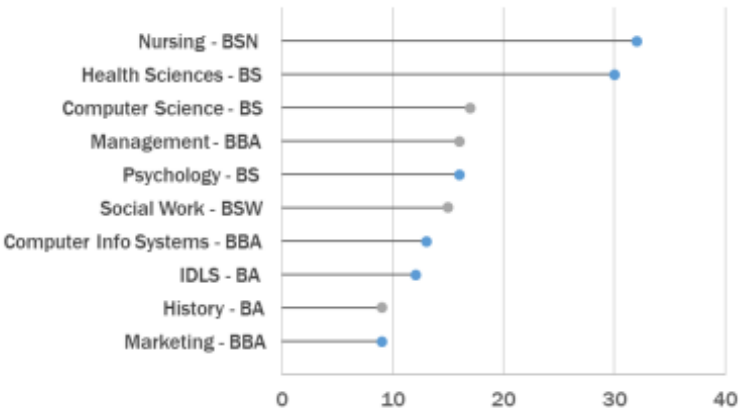
Included again in this year’s report is an analysis of the top JMU degrees earned by BRCC transfers compared to the top degrees earned by students who began at JMU as first-time students. These figures are cumulative JMU degrees earned by BRCC transfers between 2018-19 and 2021-22. In addition to the number of students who graduated, the average time to completion as well as the average number of credits earned at graduation were compared.

2.98

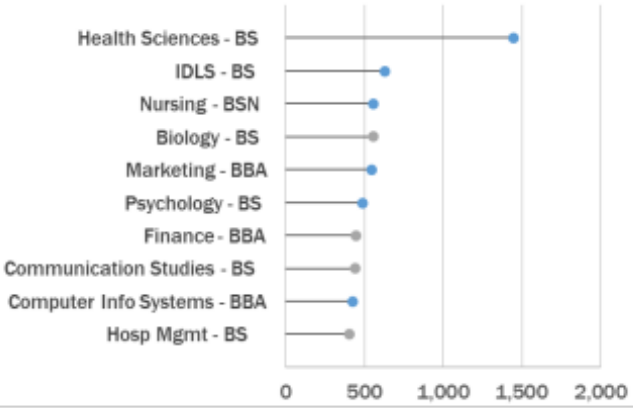
The average GPA for BRCC transfers who did not receive a Pell grant.

Figure 3 Over the past four years of JMU graduates, six of the top ten degrees earned at JMU by BRCC Graduates were the same as the top degrees earned by Native JMU students.

Top Degrees Earned by BRCC Graduates



Top Degrees Earned by Native JMU Students



As Figure 3 shows, six of the top ten JMU degrees earned between 2018-19 and 2021-22 were shared by BRCC transfers and native JMU students. The top two degrees earned by BRCC students were once again in the health professions: Health Sciences and Nursing, and these were popular majors for JMU students as well. Additionally, majors for students who start at JMU tend to be in Education (Interdisciplinary Liberal Studies or IDLS) and Business-related majors.

As Figure 4 shows, BRCC students take a wide range of time to complete the most popular degrees shared by native JMU students. In cases like Nursing students are completing in under two years, indicating the relative efficiency of their program at both the BRCC and JMU levels. In other cases, like

Computer Information Systems (CIS), BRCC students are taking closer to 2.4 years to complete the degree, compared to 4.1 years for native JMU students.

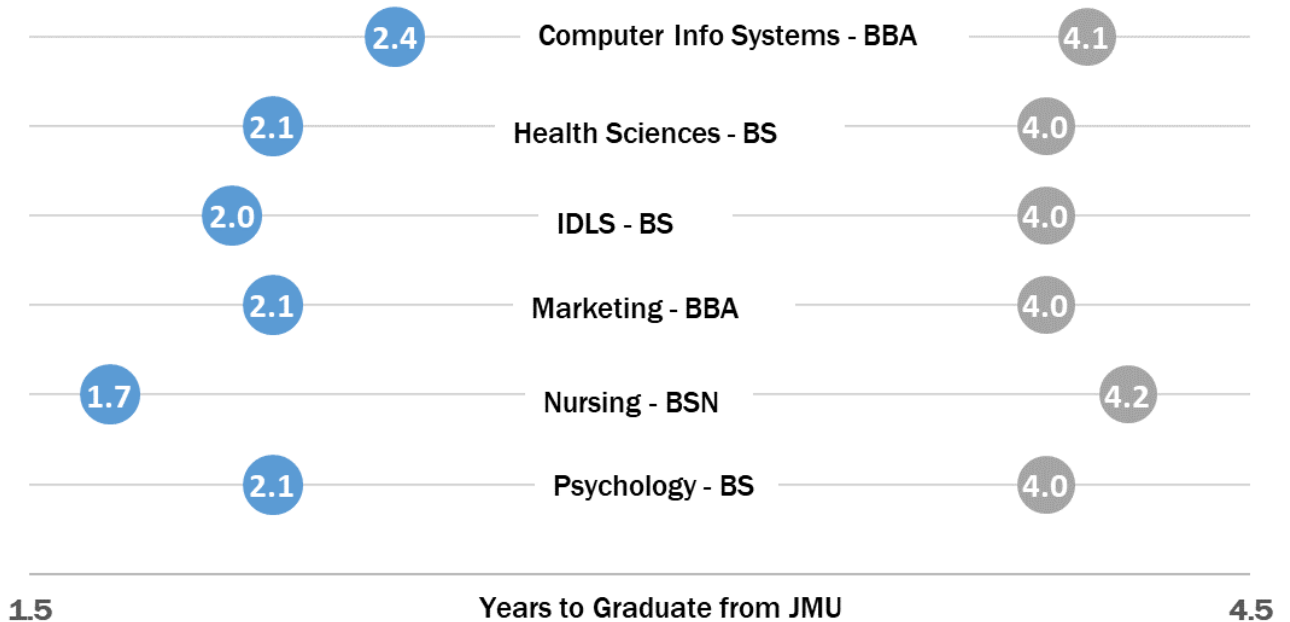
1.7 years

The average length of time it takes a BRCC transfer student to graduate with a Nursing – BSN degree from JMU

This year, data for this analysis used the aggregate of four years of degrees conferred and only BRCC associate degree earners were included. Further, the calculation of time to completion was revised to provide a more precise estimate. Thus, the information in Figure 4 provide a strong starting point for understanding the majors into which associate degree-earners seem to be transitioning smoothly versus those that may be challenging for

transfers to complete on time. For instance, Computer Information Systems majors appear to need an extra semester on average to complete the final two years of the program at JMU. Native JMU students, however, are able to complete the degree in just over four years, on average. While other top majors appear to offer a smooth transition for BRCC graduates to finish a four-year degree in a timely manner, the CIS major may offer specific obstacles in the transfer process that hinders completion for some BRCC students.

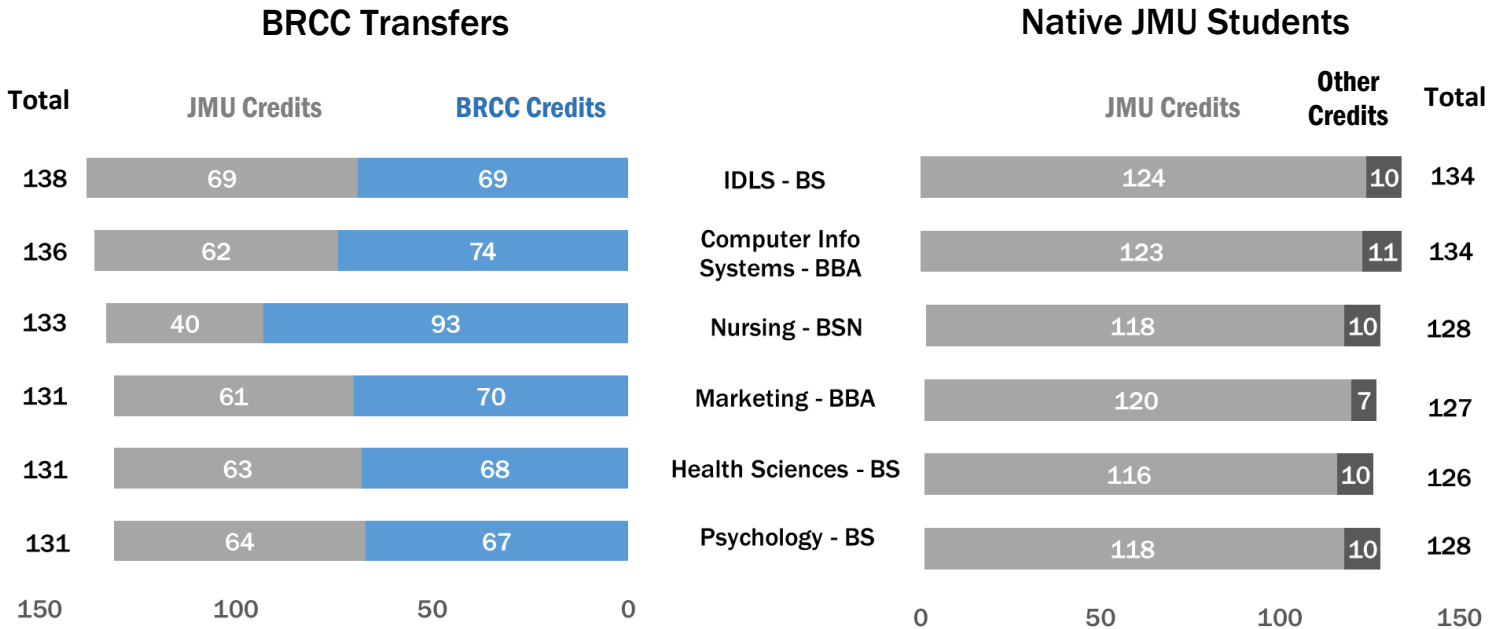
Figure 4 The average years taken to graduate among BRCC students ranged from 1.7 to 2.4 years for the top degrees conferred to both BRCC Graduates and native JMU students.



Finally, in Figure 5, top majors earned by BRCC associate degree-earners and native JMU students are compared using total credits earned. For BRCC transfers, the total number of credits earned at BRCC were added to the total credits earned at JMU. Other credits, such as AP courses or transfer credits from other institutions were not included. For native JMU students, the credits earned at JMU are provided along with other credits earned.

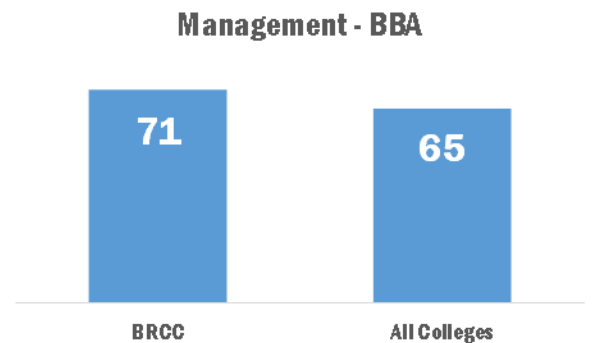
Why include other credits earned for native JMU students but not BRCC students? If one were to compare BRCC transfers and Native JMU students based solely on the credits earned at JMU, it would appear as though BRCC transfers finish their degrees with an entire semester's worth of additional credits. However, on average, native JMU students bring with them ten or more credits from additional sources like AP courses, DE classes, or other colleges. When we factor in these additional credits, BRCC transfers complete their four-year degrees with a comparable number of credits to students who begin college at JMU. Most BRCC transfers bring in very few additional credits from sources like AP courses or DE credits. Thus, the total credits earned at JMU and BRCC provide a precise value to compare against native JMU student credit totals.

Figure 5 Among the six most common degrees earned, BRCC transfers who graduate from JMU earned slightly more overall credits than did Native JMU students



While one may look at Figure 5 and think that BRCC transfers earn comparable numbers of credits to native JMU students, we can still draw some conclusions from the data. For one, BRCC students who earn a degree from JMU in Computer Information Systems are earning over 70 credits at BRCC while still completing over 60 credits at JMU to earn the degree. Similarly, IDLS majors (Education) are earning 69 credits at JMU after earning the same amount at BRCC. In both of these majors, opportunities to evaluate whether BRCC students are taking extraneous courses or could take courses that better prepared them for these majors at JMU could be considered. Second, certain majors suggest that not all the credits BRCC graduates earn in certain programs transfer to JMU. For

Figure 6 Management majors earn more credits at BRCC than what transfers to JMU.



example, Figure 6 shows that among students who completed a Management degree at JMU, BRCC graduates completed 71 credits whereas the average amount transferred in by all JMU students in that major is 65 credits. It appears that BRCC transfers may be taking more credits than what transfer to JMU, suggesting opportunities to improve the transferability of certain courses.

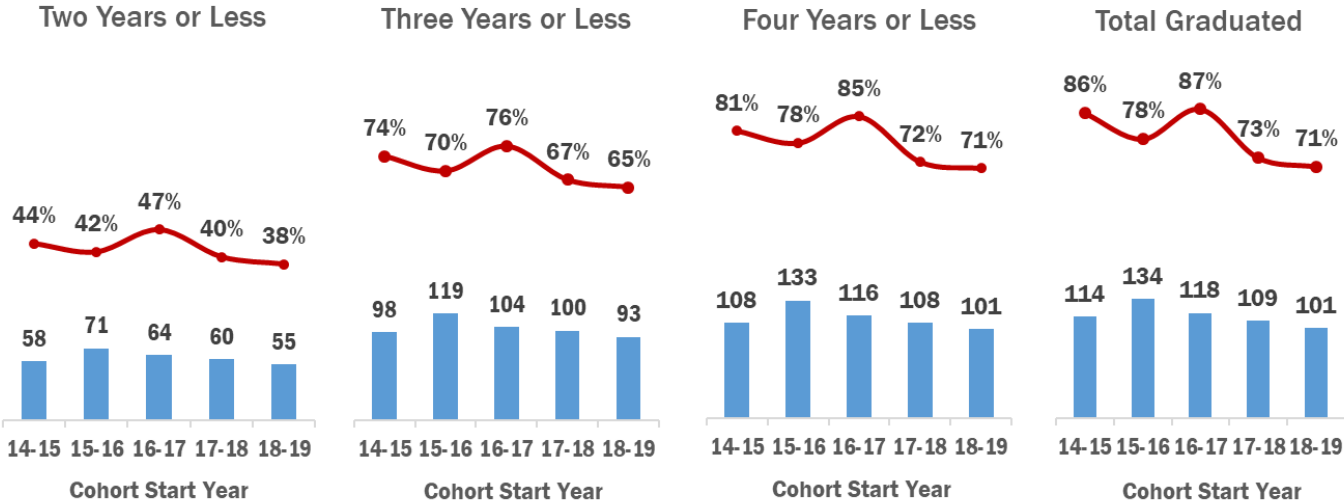
The four-year graduation rate from JMU has been declining over the past five years.

Figure 7 shows the JMU two-, three-, and four-year graduation rates for students who graduated from BRCC. The number of graduates is represented by the bar graphs and the percentages represent the proportion of students who graduated in the timeframe listed.

As Figure 7 illustrates, most students are graduating in three years or less, and 70% of transfers consistently graduate within four years of starting at JMU. The trend lines are concerning, however. They indicate that graduation rates for this population have been declining in recent years with fewer students graduating in two, three, and four years when compared to previous cohorts. The four-year rate has dropped by 10 percentage points since five years ago. The pandemic offers an obvious explanation, particularly for the two most recent cohorts, but other explanations should be explored as to not become complacent about this troubling trend.

One should note that while the total graduated value for 2018-19 is 15 percentage points lower than for the 2014-15 cohort, this group of students has not had as much time to graduate from JMU and thus, the Four Years or Less category should be the benchmark for understanding graduation trends across all the cohorts listed.

Figure 7 Over the past five cohorts, JMU graduation rates of BRCC graduates have declined.



BRCC students' GPAs in upper-level JMU course disciplines are largely in line with GPAs of native JMU students.

BRCC student performance in upper-level JMU course disciplines was compared against native JMU student performance in the same disciplines. Only disciplines where at least 100 credits were taken by at least 15 BRCC transfers were included. For a more comprehensive analysis, the credits taken between 2018-19 and 2021-22 were aggregated for the analysis. Changes across years were not analyzed.

The difference between average GPAs was calculated and charted in Figure 8. Disciplines where BRCC transfer GPA exceeded native student GPA are listed at the top, and those programs where native student GPA exceeded BRCC GPA are listed at the bottom. The red shading indicates programs where the native JMU student GPA was greater than the BRCC student GPA by at least one standard deviation (.17). The green shading reflects the disciplines where BRCC transfer GPAs exceeded native JMU students by at least one standard deviation.

In short, BRCC students perform comparably to native JMU students in a large number of disciplines. There are many disciplines, however, where BRCC students fall behind native JMU students, notably in some science and business disciplines.

Figure 8 BRCC Transfers have comparable GPAs to Native JMU students in a majority of disciplines, but lag behind in several.

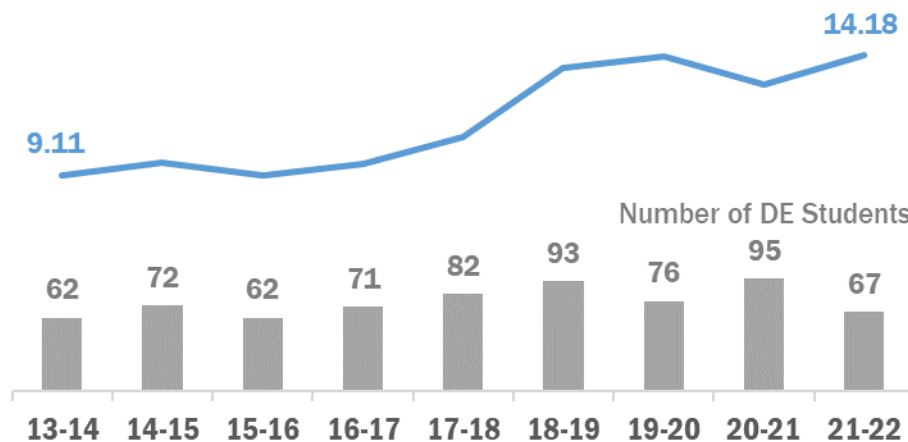


The number of students enrolling in JMU after completing BRCC dual enrollment courses has been increasing.

New to this year's report is a study of Dual Enrollment outcomes. Students who enrolled at JMU after taking dual enrollment courses through BRCC as high school students (referred to as DE students) were examined to answer several research questions posed by BRCC faculty.

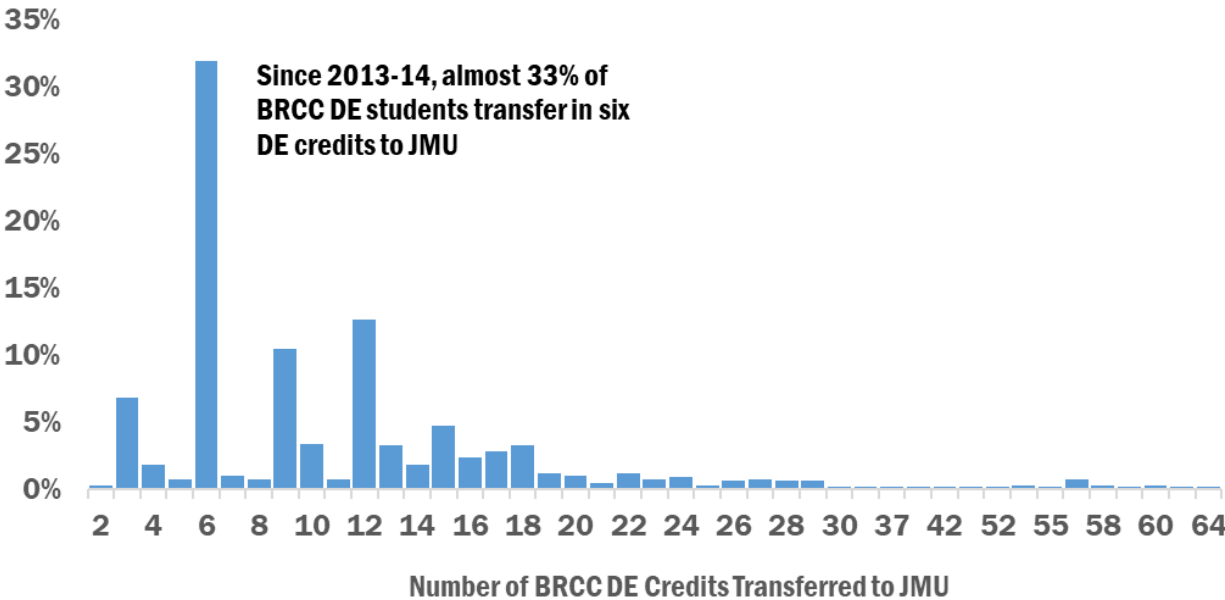
Dual enrolled credits transferred in by DE students who enrolled at JMU from 2013-14 to 2021-22 were analyzed. The number of DE students transferring in credits to JMU has remained between 62 and 95 during that time and has been increasing since 2013-2014, although there was a sizable drop in 2021-22. The number of credits being transferred per DE student has been on the rise over that time as shown in Figure 9.

Figure 9 The average number of BRCC dual enrollment credits transferred into JMU since 2013-14 has been steadily increasing.



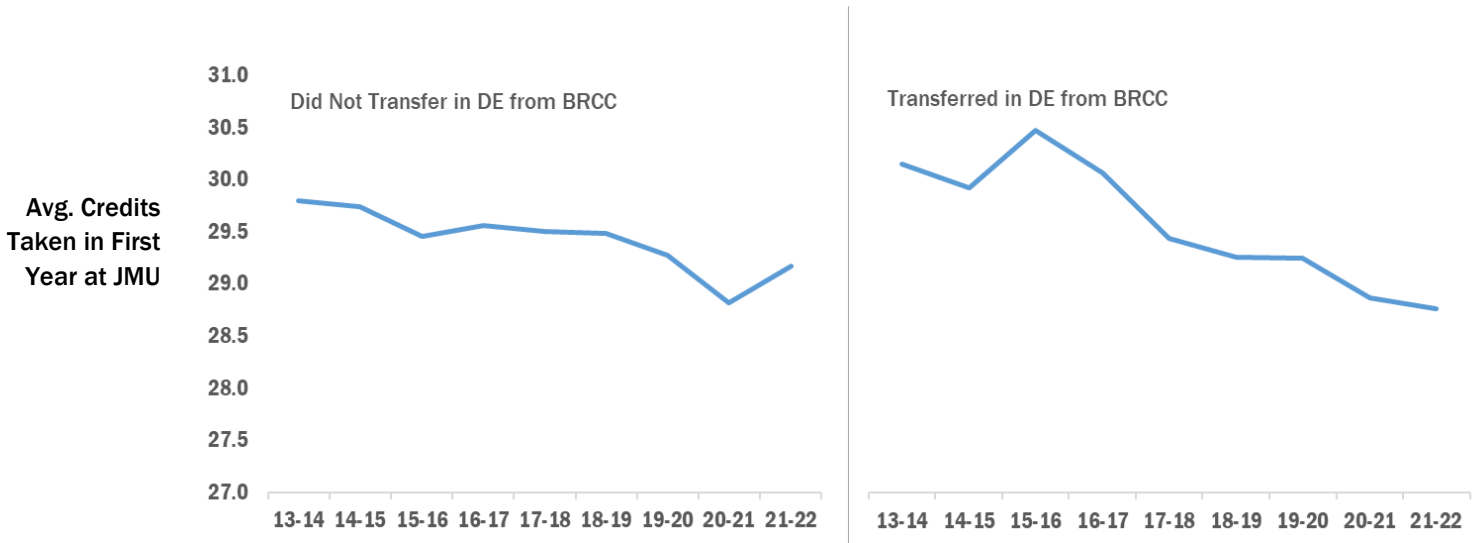
Additionally, the frequency of DE credits transferred to JMU illustrates that many students take between one to four DE courses in high school, transferring in three to twelve credits. By far, the most popular frequency is six credits, as about one-third of students transfer in that amount when coming to JMU.

Figure 10 Most DE students appear to take between one and four DE courses while in high school.



Although the highest frequency of DE students transferred in between three and twelve credits, the trend over time suggests that dual enrollment is growing in popularity. Figure 11 illustrates the shift over time in the percent of students transferring in fewer than 15 DE credits versus those transferring in 15 or more credits. In 2013-14, 89% of DE students were transferring in fewer than 15 credits. Eight years later, that percentage has decreased to 64%, illustrating an increase in interest and availability of DE courses for high school students.

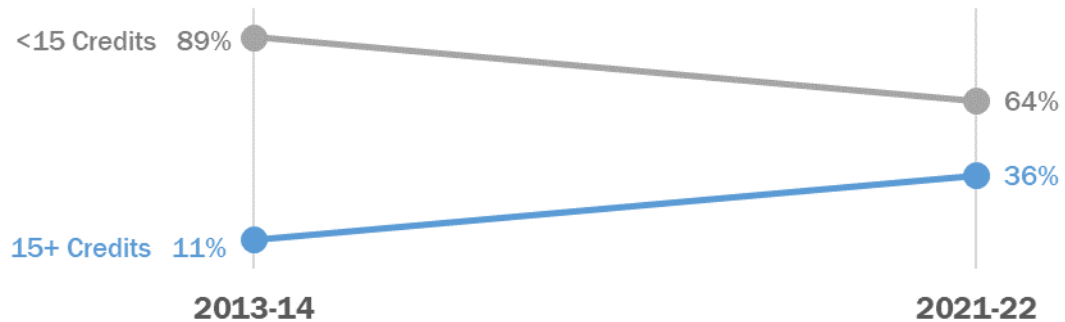
Figure 11 The percent of students transferring in 15 or more DE credits has tripled since 2013-14.



BRCC DE students take the same number of credits in their first year at JMU as do students who don't bring in DE credits.

The number of credits taken in the first year of JMU were compared between students who transferred in dual enrollment credits from BRCC and students who did not bring in any DE credits. As Figure 11 shows, the number of credits taken between the two groups is quite similar, with both groups taking fewer credits in 2021-22 than they did in 2013-14. Because DE students have been transferring in more DE courses over that time period, one might expect a different trend if taking fewer courses in their first year was a motivating factor for taking DE courses in high school. Although students who transferred in DE credits tended to take slightly more credits back in 2018-19, the most recent data show this gap has been erased, with both groups taking the equivalent amount of credits in 2021-22.

Figure 12 The number of credits taken in their first year at JMU by students who transfer in BRCC DE credits is equivalent to students who do not transfer in DE credits.



4.13 years

The time to completion for students who transfer in DE credits and for those who do not

We often wonder whether students who complete DE credits graduate in less time than students who do not transfer in DE credits. To answer this question, I analyzed students who were admitted to JMU between 2013-14 and 2016-17, comparing

those who transferred in BRCC DE credits from those who did not bring in any DE credits. There was no appreciable difference in the time to completion among the two groups, with each group taking an average of 4.13 years to graduate.

The most common DE courses students transfer to JMU are in English, math, and history.

Of all the dual enrollment courses transferred into JMU by BRCC DE students, ENG 111 and ENG 112 were by far the most common. Students also transferred in a number of math and history courses. Figure 14 shows the most common BRCC DE courses taken by JMU students since 2017-18 based on the number of credits transferred in.

Figure 13 Over 1,000 credits of ENG 111 were transferred by BRCC DE students since 2017-18.

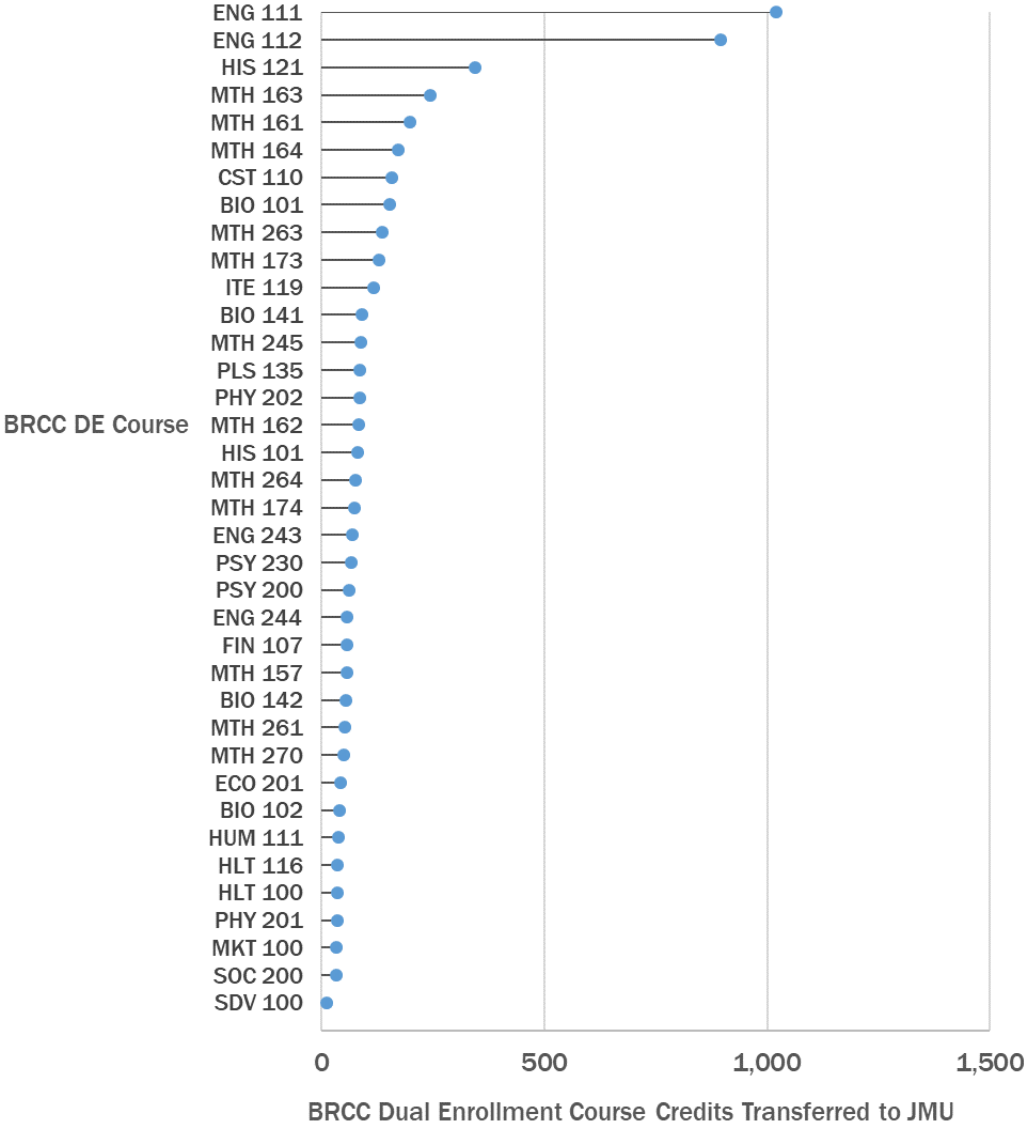


Figure 14 shows the top fifteen DE courses transferred in by students between 2017-18 and 2021-22 and the courses at JMU that those DE credits counted towards. JMU courses with a “OOO” notation are considered general elective credits and do not count for a specific JMU requirement. Although ENG 111 has long been the most common DE course, in 2020-21, these DE credits began counting as general elective WRTC OOO instead of WRTC 100. WRTC 100 is now considered more of a preparatory course for WRTC 103, which can still be fulfilled with the ENG 112 DE course.

Figure 14 Between 2017-18 and 2021-22, English, history, and math DE courses were widely counted for general education credits. In 2020-21, ENG 111 no longer counted for WRTC 100.

	Dual Enrollment Course	JMU Course	Units Transferred
1	ENG 111	WRTC 100	675
		WRTC 000	339
2	ENG 112	WRTC 103	888
3	HIS 121	HIST 225	311
		HIST 000	28
4	MTH 163	MATH 135	117
		MATH 155	87
		MATH 000	38
5	HIS 122	HIST 225	44
		HIST 000	173
6	MTH 161	MATH 135	108
		MATH 155	81
7	MTH 164	MATH 135	66
		MATH 000	103
8	CST 110	SCOM 121	153
9	BIO 101	BIO 140	138
10	MTH 263	MATH 235	132
11	MTH 173	MATH 235	128
12	ITE 119	UNST 001	111
13	BIO 141	BIO 290	28
		BIO 000	52
14	PHY 202	PHYS 150	84
15	PLS 135	POSC 225	83
16	HIS 101	HIST 201	81
17	MTH 245	MATH 220	78
18	MTH 162	MATH 000	64

Overall, trends among BRCC transfers to JMU paint a picture of success by BRCC students at both institutions, although graduation rates suggest challenges ahead.

Much like the previous version of this report, BRCC transfers are demonstrating success prior to their time at JMU and continue that success once there. GPAs compare well to students who began their career at JMU. In most areas, BRCC students perform comparably to JMU students, though there was no clear area where BRCC students strongly outperformed native JMU students. In other areas, notably business and certain sciences, BRCC students lag behind native JMU students in upper-level JMU courses.

Further, the popularity of dual enrollment courses has been growing over the past several years. There are more students transferring in DE courses and the students taking DE courses are transferring in a greater number of credits. There is no appreciable difference in time to completion or in the number of credits students with DE credits are taking at JMU in their first term. This finding suggests that students may not be taking DE courses to shorten time in college, though this conclusion might be premature without further investigation.

The downward trend in graduation rates is troublesome and while the pandemic is the most obvious explanation, we should not assume that rates will bounce back up over the next few years. To the extent that BRCC and JMU can work together to understand the root causes of this decline, both institutions, and the students who we serve may be better for it.

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