

ACTION RESEARCH

Students more likely to graduate in associate degree programs that require 60 credits



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Credit Creep

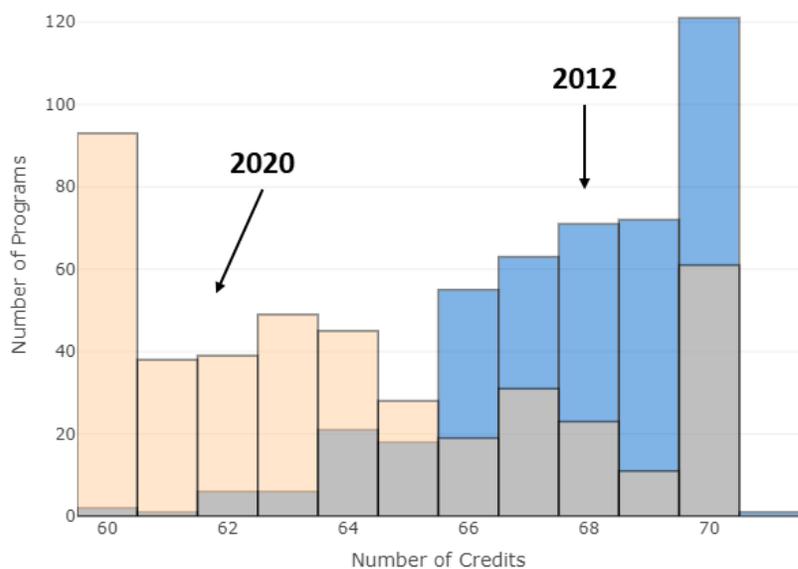
In 2012, Complete College America published results from a national survey on credit requirements for post-secondary degrees.¹ Their findings showed that associate degree credit requirements varied substantially across two-year colleges and that most associate degree programs required more than 60 credits (61 to 86 credits). This finding was described as ‘credit creep’ and presented a call to action for colleges to review program requirements.²

This action research project evaluates associate degree program credits across the Wisconsin Technical College System (WTCS) and quantifies the effect of reducing credit requirements on student graduation rates.

Analyses and Results

Of the 437 associate degree programs across the WTCS in 2012, 99% had more than 60 credits. By 2020, 314 programs reduced the required credits with 29% reducing to the recommended 60 credits. Due to licensing, or accreditation and transfer requirements, particular program areas within Health Sciences and STEM still require more than 60 credits.

Figure 1. Histogram of the number of WTCS programs that require a set number of total credits. Blue bars represent programs in 2012 and tan bars represent programs in 2020. Gray bars show overlap.



¹ Johnson, N., L. Reidy, M. Droll & R.E. LeMon. 2012. Program requirements for associate’s and bachelor’s degrees: A national survey. Complete College America.

² Fain, P. 2013. Associate degree program requirements typically top 60 credits. Inside Higher Ed.

A difference in difference binomial regression was used to assess how the reduction in required credits influenced program completion. This analysis helps to remove biases due to unmeasured changes over time (e.g., implementation of initiatives not related to decreasing associate degree total credits). This model included programs with 65 or more credits in 2012 and remained at 65 or more credits (control group) in 2020 and programs that reduced to 60 credits in 2020 (treatment group).

To control for variation, 12 programs were included that were offered at multiple colleges and some colleges did not reduce the total credits to 60 (control) and other colleges did reduce credits to 60 (treatment, see [Appendix A](#) for list of programs). As the outcome for the model, 3-year program completion was assessed for the 2014 and 2015 student cohorts (prior to the reduction in credits for ‘treatment’ programs) and 2018 and 2019 student cohorts (after the reduction in credits). In total, over 12,000 students were included in the analyses. See [Appendix B](#) for model information.

Results show that overall program completion rates decreased by 16% from the 2014-2015 cohorts to the 2018-2019 student cohorts. However, this trend was reversed for the associate degree programs that reduced credits to 60. **The odds of completing the program within three years was 1.8 times higher for students in programs that reduced to 60 credits.** This positive affect was most pronounced for students of color who had a 2.7 times higher chance of graduation in programs that reduced to 60 credits.

It is important to note that the programs included in this analysis had fewer external restrictions (e.g., licensing) that affect program credit requirements. Not all associate degree programs will easily be able to decrease total credits due to external factors (e.g., licensing, accreditation, etc.).

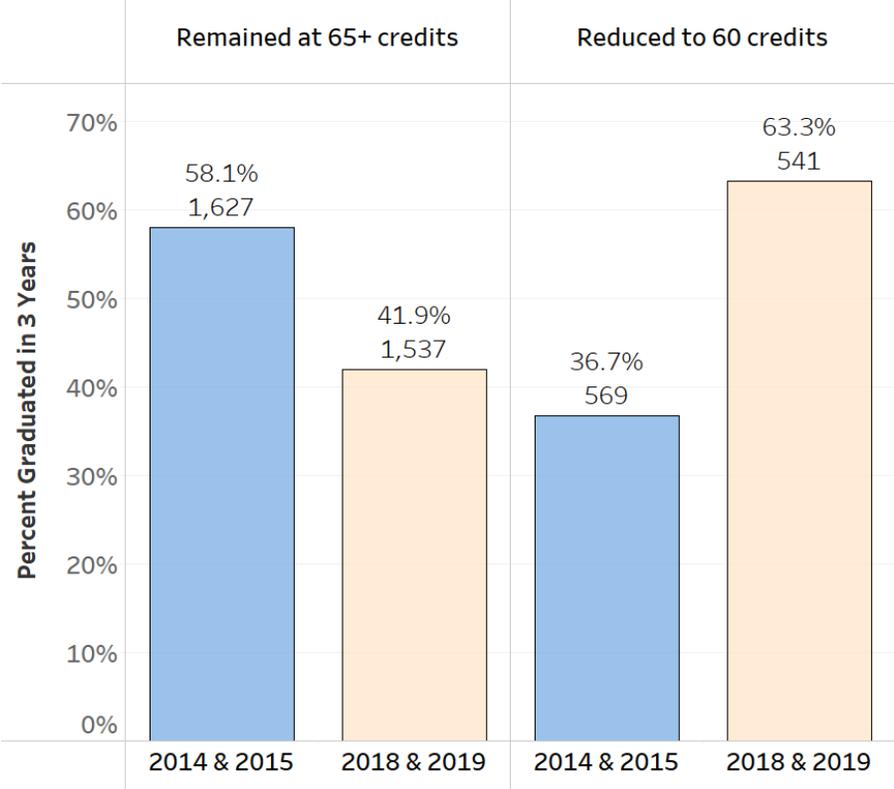


Figure 2. Percent of students of color who graduated within three years prior to and following program credit changes in programs that remained at 65 or more credits and programs that reduced credits to 60. Blue bars represent the 2014 and 2015 cohorts. Tan bars represent the 2018 and 2019 cohorts. The number above each bar is the number of students included within the assessed cohorts.

Recommendations

Review associate degree programs that have more than 60 required credits. Evaluate the curriculum and compare to similar programs offered at other Wisconsin Technical Colleges that have reduced the total required credits.

For programs that have more than 60 credits due to accreditation and/or external licensing, consider the following guidance from Complete College America:¹

- Could requirements be met with fewer credits (e.g., reducing elective courses)?
- Does Wisconsin grant reciprocal licensure to workers from other states that have lower requirements?
- Are licensing and accrediting bodies knowledgeable of the national norms for these program areas?

For example, Wisconsin is part of the [Nurse Licensure Compact](#) with over 30 other states. As part of this compact, nurses can gain licensure in one state with the ability to practice in all compact states. In some of these states, associate degrees in nursing are only 60 credits (e.g., West Virginia).

Discuss and debrief the results of program reviews using the following discussion questions:

- What factors influence associate degree credit requirements in your program? Consider transfer requirements, advisory committee input, external licensing, accreditation, and other factors.
- Are there additional student outcomes (transfer, jobbing out, performance on licensing tests, student debt) that should be highlighted? How might the number of total degree credits affect these outcomes?
- Given Wisconsin's changing demographics ([2021 System-wide Equity Report](#)) and the increase in program completion for students of color in programs that reduced to 60 credits – how does this impact your college and your program?
- For associate degree programs that have decreased credits to 60:
 - Have the entry requirements for the program, such as pre-requisites or test score cutoffs, also changed? If so, how may these influence overall program completion and student equity in program access and success?
 - What have employers been saying? How has their satisfaction with graduates from this program changed?

Appendix A

Table 1. Summary of WTCS programs included in this analysis. Year(s) of credit reduction provides the year (or potentially years when there are multiple treatment programs) when the treatment program decreased required credits to 60. No programs met criteria for inclusion in the Architecture and Construction; Education and Training; Health Sciences; Law, Public Safety, Corrections and Security; and Marketing, Sales and Service Career Clusters.

Career Cluster	Program	Number of Treatment Programs	Number of Control Programs	Year(s) of Credit Reduction
Agriculture, Food and Natural Resources	Horticulture (10-001-1) and Landscape Horticulture (10-001-4)*	1	2	2018
Arts, AudioVisual Technology and Communications	Interior Design (10-304-1)	1	2	2018
Business, Management and Administration	Leadership Development (10-196-1)	2	2	2018
Business, Management and Administration	Business Management (10-102-3)	3	1	2017, 2018
Finance	Accounting (10-101-1)	1	2	2018
Finance	Finance (10-114-2)	1	1	2018
Hospitality and Tourism	Culinary Arts (10-316-1)	1	2	2018
Human Services	Human Services Associate (10-520-3)	1	2	2018
Information Technology	IT Network Specialist (10-150-2)	2	2	2018
Manufacturing	Electromechanical Technology (10-620-1)	1	3	2018
Science, Technology, Engineering and Mathematics	Mechanical Design Technology (10-606-1)**	1	2	2018
Transportation, Distribution and Logistics	Supply Chain Management (10-182-1)	2	1	2017, 2018

*For Agriculture, Food and Natural Resources two similar programs (Horticulture vs. Landscape Horticulture) were used since there was no one program that was offered at multiple colleges that fit credit reduction criteria for a treatment and control group.

**Treatment program reduced to 61 credits, not 60.

Appendix B

Table 2. Difference in difference binomial model for all students (N = 12,091) enrolled in WTCS associate degree programs.

Effect	Estimate	Standard Error	Z Value	P Value
Intercept	-1.46	0.04	-35.71	<0.001
Treatment	-0.01	0.06	-0.18	0.856
Time	-0.17	0.06	-2.85	<0.05
Treatment x Time	0.57	0.09	6.06	<0.001

Null deviance of 11,889 on 12,090 degrees of freedom; residual deviance of 11,820 on 12,087 degrees of freedom; AIC of 11,828

Table 3. Difference in difference binomial model for students of color (N = 4,274) enrolled in WTCS associate degree programs. Part-time status is identified in the student's first year of the cohort as enrolling in fewer than 24 credits for the academic year.

Effect	Estimate	Standard Error	Z Value	P Value
Intercept	-2.12	0.08	-26.47	<0.001
Treatment	-0.13	0.16	-0.77	0.441
Time	-0.30	0.12	-2.40	0.016
Treatment x Time	0.98	0.22	4.44	<0.001

Null deviance of 2,855.4 on 4,273 degrees of freedom; residual deviance of 2,822.8 on 4,270 degrees of freedom; AIC of 2,830.8