

Three-Year vs. Four-Year Foreign Degree: Is the Success Rate of Students Different at the Master's Degree Level in the United States?

Dr. Rebecca J. Cecil

Graduate Business Programs Coordinator
Campbellsville University School of Business, Economics, and Technology
Louisville Education Center (LEC)
2303 Greene Way
Louisville, KY 40220, USA

Dr. Sunny Onyiri

Professor of Accounting and Finance
Campbellsville University School of Business, Economics, and Technology
Louisville Education Center (LEC)
2303 Greene Way
Louisville, KY 40220, USA

ABSTRACT

In the U.S. and most of Europe, the model in higher education is and has been, the four-year, 120-hour Baccalaureate degree. The main emphasis on college education in the U.S. is to provide a well-rounded education in the liberal arts. In India, where the philosophy of higher education is to prepare a student for a specific field of work, the three-year bachelor's degree is commonplace in most arts, sciences, and business degrees. There, the tasks of providing a well-rounded education and helping the student determine a career path are goals of secondary education. With the emergence of the European Union (EU), the Bologna Process is becoming popular in Europe, which among other things, has been looking at ways to condense the bachelor's degree into three years. Merits of the three-year vs. four-year bachelor's degree are discussed, along with a synopsis of trends in the future of undergraduate education.

When converting foreign degrees to U.S. equivalency, credentialing organizations typically have not recognized a three-year bachelor's degree as equal to a U.S. bachelor's degree, for reasons discussed herein. From a pragmatic standpoint, a credential evaluation is most frequently requested to show readiness for entry into master's or PhD programs. Thus, it would be beneficial to know if graduates with three-year degrees can succeed at the graduate level.

In this study, academic performance was analyzed of international students studying in a Master of Science in Information Technology Management program. All students in this study had earned either a three-year Bachelor of Science or a four-year Bachelor of Technology (engineering) degree from an accredited university in India. No statistically significant difference was found in graduation rate, and of those who graduated, no statistically significant difference was found in first semester GPA (Grade Point Average).

Results show that graduates of a three-year bachelor's degree are as adequately prepared for graduate study as are graduates of four-year bachelor's degrees. It is recommended that graduate schools consider the three-year bachelor's degree as equivalent to longer duration bachelor's degrees when determining entrance into a master's degree program.

KEYWORDS: three-year bachelor's degree, Bologna process, international credit evaluation, university equivalence, college electives, general education, Indian higher education

INTRODUCTION

A bachelor's degree is an undergraduate study in one or several academic areas in an academic institution of higher learning. In general, it is the student who chooses a desired field of study. However, an assigned academic advisor can suggest areas of study based on the student's future career goals. In the United States, obtaining an undergraduate degree in specific area(s) opens the door to multiple opportunities. These include job opportunities, enhancement of analytical skills, exposure to emerging ideas/trends, and pursuit of advanced degrees. A bachelor's degree can increase a student's earning potential.

In the United States, a bachelor's degree is a 4-year program. However, in some countries such as India, Canada, Pakistan, Nepal, and Australia, 3-year undergraduate programs are common. The difference between the 4-year United States' bachelor's degree and the 3-year bachelor's degree is typically in the general education courses. These general education courses cover several areas including math, social and behavioral sciences, history, English, natural sciences, and humanities (literature, arts, and foreign languages). The general education requirements typically range between 30 and 36 credit hours. With the additional general education courses, the United States bachelor's degree requires about 120 semester hours, or 180 quarter hours for institutions using the quarter system. In the nations where 3-year degrees are common, the general education requirement is not part of the degree programs. However, the total credit hour requirements for the 3-year degree programs can be up to 150-credit hours, with most of the total credit hours in the core field of study. This is more than the credit hour requirements for most U.S. bachelor's degrees. Thus, it can be argued that the three-year bachelor's degrees offered by many non-U.S. institutions provide at least as much, if not more study in the student's chosen field.

If a non-U.S. three-year bachelor's degree is not recognized in the U.S., either by hiring agencies or institutions of advanced learning, the results can be detrimental to all parties involved. Graduates with strong academic qualifications may not be considered for job opportunities. They may be required to take an additional year of study at the bachelor's level before qualifying for an advanced degree program, costing both time and money.

The U.S. Educational Model

The current U.S. model in higher education is centered around a four-year, 120-hour Baccalaureate degree, and has been for centuries (Allen, 1973). This paradigm was challenged briefly in the late 1800s by Harvard and Yale, and again in the 1970s and sporadically thereafter, but overall has stood the test of time. According to Allen, discussions surrounding the three-year bachelor's degree can be categorized in four general streams of thought: the compression or acceleration model, the early admission model (i.e. dual credit), the credit-by-examination model (i.e. AP and CLEP exams), and the restructuring model. The first three models, and possibly the fourth to some extent, still include many general education credits. Further, the first three models are only appropriate for gifted or precocious students, or older students with significant work experience, and not the typical 18-year-old U.S. high school graduate. A compressed timeline model usually requires the same number of credits, requiring students to sacrifice extracurricular activities.

Proponents of the three-year model in the U.S. have cited cost, first year repetition of material already mastered in secondary school, and questioning the need for the same number of years of education regardless of the discipline (Allen, 1973). More recent studies cite the same arguments, with the addition of increased immigration from three-year bachelor countries, and despair over the low domestic graduation rates (Viator, 2023). Viator suggested that graduation rates could be increased if degrees were more streamlined. With the explosion of the cost of education over the last decade, more students, saddled with debt, are questioning the value of courses that do not lead directly to their ability to achieve their vocational goals.

Opponents of the three-year model in the U.S. have cited the concern that arguments are too cost driven and not driven by educational objectives, the potential to undermine the liberal arts core, and the potential to undermine the intellectual and social development of students (Marcy, 2020). Quoting Hansen (2006), Marcy continues that a bachelor's degree should signal not merely mastery of the discipline named on the degree, but also mastery of inquiry, writing, analysis, and intellectual rigor. Giving up the liberal arts component would degrade the bachelor's degree to a mere certificate. Marcy (2020) further points out that with the growth of technology and internationalization, the breadth of needed information is expanding, not contracting.

The Indian Model

In India and many other countries, a well-rounded liberal arts education is a goal of the secondary education, and the focus at the bachelor's level is to prepare for a specific field of work (Clark, 2006). Thus, the Bachelor of Arts or Bachelor of Science degrees in India can be completed in three years rather than four. Without the general education electives, the core content is often studied at a deeper level at the bachelor's level, making their core content more solid (Ramos, 2020), often equivalent to some of the core material studied at the master's level in the U.S. The exceptions include the technology degrees, which are four-year degrees in India. These are comparable in scope to five-year engineering degrees in the U.S. Medical and law degrees are also longer in duration.

In the nations where 3-year degrees are common, the general education requirement is not part of the degree programs. However, the total credit hour requirements for the 3-year degree programs are about 150-credit hours. This is more than the credit hour requirements for most U.S. bachelor's degrees. In the 3-year degree programs, courses may be compressed to allow the students complete the degree requirements within 3 years. Table 1 below is an example of typical credit hour requirements in Indian universities, and shows the typical education stream in India.

Table 1: Higher Education Stages in India

Category	Year	Ages	Comments
Undergraduate	First year	18-19	1-year Vocational Certificate
	Second year	19-20	2-years Vocational Diploma (50 - 60 credits)
	Third year	20-21	3-year Bachelor's degree (150 credits) or Advanced Diploma (120 credits)
	Fourth year	21-22	4-year Multidisciplinary or Technology Bachelor's degree (120 -160 credits) or P.G. Diploma (60 credits)
	Fifth year	22-23	5-year Bachelor's degree such as MBBS (180 - 200 credits) or law.
Graduate	First year	21+	Regular Multidisciplinary Master's degree (120 -150 credits)
	Second year	22+	
	Third year	23+	3-years Master's degree such as MCA with Internship (180 credits)
Doctorate		24+	Up to 5 years and 125 credits

Source: Indian University Grants Commission. Retrieved from https://www.ugc.gov.in/pdfnews/6556003_Guidelines-for-providing-Skill-Based-Education-under-NSQF.pdf

Using the 3-year Indian degree as an example, the 150-credit hour requirement does not include the typical general education courses required in a U.S. bachelor's degree. The 150 credit hours are segmented into professional knowledge, professional skills, core skills, and responsibility. "Professional knowledge is what a learner should know and understand with reference to the subject. Professional skills are what a learner should be able to do and. Core skills refer to basic skills involving dexterity and use of methods, materials, tools, and instruments used to perform the job including IT skills needed for that job. The responsibility aspect determines the (i) nature of working relationship, (ii) level of responsibility for self and others, (iii) managing change and (iv) accountability for actions" (University Grants Commission, 2018).

The Chinese Model

Two prestigious universities in China, Peking and Tsinghua Universities, are working on plans to provide more flexibility in higher education to retain students (Liu, 2022). Peking is rolling out a program that will enable students to begin a master's degree after three years of work at the bachelor's level. Their goal is to retain top students and encourage them to enter higher-level studies. While prestigious schools compete for top students, little has been said about opportunities for average students.

The European Union Model

With the advent of the European Union, steps have been taken to unify higher education in Europe, to create a common system of credits, and promote mobility between member countries and universities. The Bologna Declaration was signed in 1999 in Bologna, Italy. In 2010 the European Higher Education Area was developed with 48 member countries to implement the necessary educational reforms (COE, 2023). The Bologna Process defined a three-cycle degree system that includes bachelor's, master's, and doctoral degrees, like those in the U.S. (Inamete, 2015). The process also defines bachelor's degrees in some areas such as management and other business disciplines, as three-year degrees. As Inamete (2015) pointed out, however, a management degree from a Bologna Process country would have approximately 90 percent of the courses in the core discipline area, with the remaining ten percent in related areas, while a U.S. degree would have only about 30-50 percent of the courses in the core area, with the remaining courses being general education. As in India, the author further noted that students in Bologna Process countries complete their general education in at the secondary level. Marcy (2020) noted that the success and acclaim of Oxford's three-year degrees depends in part on the preparedness of students coming through Britain's secondary system.

Model Comparisons

An anecdotal comparison of engineering degrees in the U.S. in the 1950s, 1980s, and 2010s reveals an increase in general education requirements over the decades. A review of course catalogs and flight plans provide a more detailed picture. Table 2 below shows a summary of core vs. elective/gen-ed courses for a bachelor's degree in Mechanical Engineering at one university. It is interesting to note that in the 1952 catalog, most electives were designed to support ROTC requirements, as this was less than a decade after WWII and during the Korean War. Other choices were closely tied to the engineering disciplines, such as Industrial History or Engineering Economics. In 1979, the 27 elective hours were free electives with no restrictions, although many students used them for engineering electives. By 2018, the electives had stipulated minimum hours in a writing intensive, diversity, or other requirements. For comparison, in Table 2 a course was considered an elective if it was not in the engineering disciplines, regardless of whether it was a required course (such as English 101), and an elective that had to be chosen within an engineering discipline was considered a core course. Additionally, in 1952 the bachelor's degree was a five-year program with four quarters (12 months) of co-operative internship. In the early 1970s, the program was reconfigured to a four-year program with required summers, for eight academic semesters and three semesters (12 months) of internship. The fifth year, not tabulated below, was reconfigured to an optional three-semester master's degree.

Table 2: U.S. Engineering Core vs. Elective/Gen-Ed Courses over Time.

Catalog Year	Core	Elective & Gen-Ed	Total	Core Percent of Total
1952-1953	126	18	144	88%
1979-1980	95	27	122	78%
2018-2019	104	21	125	83%

While U.S. academic leaders would cite this as an improvement in preparing students for success, evaluators in other countries would compare the 1952 catalog to later years and see this as evidence of the dumbing down of American education, not as an improvement in the well-roundedness of the American graduate. This highlights the cultural differences in the perceived purpose of tertiary education. The change from a five-year to a four-year bachelor's degree indicates this university's response to external factors, whether they be economic, social, or competitive in nature, to meet the changing needs of the times.

Comparing U.S. and Indian engineering degrees also provides insight. Although the grading schemes are quite different, comparing the ratio of core to total credits in Table 3 shows clearly that the engineering degree in India focuses exclusively on core engineering fields.

Table 3: Recent U.S. vs. India, Engineering Core vs. Elective/Gen-Ed Courses.

Catalog Year	Core	Elective & Gen-Ed	Total	Core Percent of Total
US (2018-2019)	104	21	125	83%
India (2014)	192	8	200	96%

A comparison of a bachelor's degrees in a non-technical field also yields insightful results. Table 4 shows the U.S. Bachelor of Business or Business Administration in an earlier and a more recent year at a midwestern liberal arts college, compared to the Indian three-year Bachelor of Commerce. Note that the 2010-a and -b entries are two different schools with different grading schemes. Also note that in both cases, the electives for the Indian degrees were almost exclusively English or local language courses. As can be expected from a U.S. liberal arts college, for the 2018 catalog year, 40-42 credit hours of the 54 listed are specifically general education classes, while the remainder are electives with no restrictions.

Table 4: U.S. Business vs. India Commerce Programs, Core vs. Elective/Gen-Ed Courses over Time.

Catalog Year	Core	Elective & Gen-Ed	Total	Core Percent of Total
US (1962-1963)	53	75	128	41%
US (2018-2019)	66	54	120	55%
India (2010s-a)	16	4.5	20.5	78%
India (2010s-b)	15	6	21	71%

The Future of the Three-year Bachelor’s Degree in the U.S.

Despite the mixed opinions of the efficacy of three-year degrees, a few U.S. institutions have experimented with them. In 2009 the University of Maine announced plans to offer a three-year degree in education (Lynds, 2009). It was to have been an accelerated program for academically gifted students who were already confident in their chosen career path. A dozen years later, there is no indication whether the program was offered, nor whether there were enough gifted students willing or able to study on an accelerated schedule.

While there is still uncertainty about U.S. colleges and universities offering 3-year degree programs, in 2021, Dr. Bob Zemsky, Professor at University of Pennsylvania, and Dr. Lori Carrell, Chancellor at University of Minnesota Rochester, teamed up to start the “College-in-3” project (Whitford, 2021). Partnering with 13 universities and colleges, they are exploring ways to offer a meaningful three-year bachelor’s degree without compressing the same 120 credit hours into a smaller duration of study. Starting with a blank canvas, they are asking questions around how to achieve the same goals in a different manner. The most recent proposal is a 3-year degree program that would not be based on semester or quarter system. Instead, it would be based on 7-week modules over a three-year period. This would allow students to complete 120 credit hours in three years. The institutions in this pilot project include University of North Texas, Portland State University, University of Wisconsin at Oshkosh, American Public University System, Northwood University, Indiana University of Pennsylvania, Slippery Rock University, New England College, University of Texas Rio Grande Valley, University of Minnesota at Rochester, Merrimack College, and Utica College (CollegeRaptor, 2023).

Based on the number of colleges in the 3-year pilot program, overcoming accreditation requirements seems to be one of the major challenges. However, in fall 2023, The Northwest Commission on Colleges and Universities (NWCCU) approved seven 3-year degree programs at Brigham Young University and affiliated Ensign College (Moody, 2023). These programs require between 90 and 94 credit hours as opposed to the traditional 120 credit hours.

As recently as June of this year, in a hearing on postsecondary innovation, the U.S. House Higher Education and Workforce Development Subcommittee discussed ways to reimagine college education, pointing out that the “conventional four-year college experience” is no longer the norm (Higher Education and Workforce Development Subcommittee, 2023). Getting Congress involved is important because the U.S. Department of Education can either create roadblocks, whether real or perceived, or pave the way for experimentation with non-typical degree programs (Basken, 2023).

Credential Evaluations

Because of differences in both educational systems and languages, when a student from another country wishes to continue studies in the U.S., the accepting university will typically require a transcript evaluation. The most common is World Education Services (WES, 2023), although Educational Perspectives (EP, 2023) and Educational Credential Evaluators (ECE, 2023) are also commonly accepted. Many institutions will accept a credential evaluation from any organization that is a member of the National Association of Credential Evaluation Services (NACES, 2023). NACES is a trade organization which provides oversight to credentialing organizations. Transcript evaluation services translate the transcript into English and convert number of credits per course to the standard U.S. 120 credit hours for a bachelor’s degree, or 30-36 credit hours for a master’s degree.

According to WES, the criteria assessed when evaluating transcripts include “the level, structure, scope, and *intent* of the program” (WES, 2014, p. 1). Previous decisions by credential evaluation agencies to not accept three-year bachelor's degrees as equivalent to U.S. four-year bachelor's degrees stem, in part, from the quality of education in many countries in the 1970s. In India, significant work was done to improve education in the 1980s and 1990s, including the University Grants Commission’s creation of the National Assessment and Accreditation Council in 1994. With adequate oversight, the quality of higher education in India has improved over the last two decades. In 2007, WES made a policy change to recognize the Indian 3-year Bachelor’s degree as equivalent to the U.S. bachelor's degree when the degree is earned in Division I (i.e. First Class or First Class with Distinction), and when the degree granting institution has been accredited by the NAAC with a grade of “A” or better.

As of 2020, ECE and EP did not consider the three-year bachelor's degree. ECE based their credential evaluation on three principles: intellectual ability (there are bright, average, and dull students everywhere), education level (there is a significant difference between primary, secondary, and tertiary education) and academic work volume (one year of study equals one year everywhere) (St. Laurent, 2019). EP did acknowledge the intensity of the core content of the three-year bachelor’s degree, and conceded that in the end, the individual university can decide how to handle equivalency regardless of the credential evaluator’s opinion (Ramos, 2020). More recently, in an online chat with representatives from both organizations, they said they would consider three-year degrees from certain countries within the Bologna Process on a case-by-case basis but provided no further information without knowing the country and seeing the actual transcript.

Some U.S. business schools do accept three-year bachelor’s degrees as qualification for entrance into their master’s programs in certain situations. For example, Syracuse University accepts three-year degrees under the Bologna Declaration, but not Indian or other Asian three-year bachelor’s degrees (Syracuse, 2023). Incidentally, they accept three-year bachelor’s degrees from Quebec, but require a four-year degree from other Canadian provinces. Vanderbilt University’s Owen Graduate School of Management is similar. However, they also accept three-year bachelor’s degrees from India and nearby countries with a WES evaluation certifying that the degree is equivalent to a U.S. bachelor’s degree (Vanderbilt, 2023). University of North Carolina, Charlotte, defers to WES, but also states they accept a three-year bachelor’s degree plus one year of master’s level work without additional evaluation (UNC, 2023). Websites are available that show more extensive lists of U.S. universities that accept three-year bachelor’s degrees; however, the reader will need to verify their accuracy and currency.

ANALYSIS

When assessing the worthiness of a three-year bachelor’s degree, there are two key areas to consider:

1. Does the three-year bachelor’s degree adequately prepare a student to work successfully in a job that requires a bachelor’s degree?
2. Does a three-year bachelor’s degree adequately prepare a student to study successfully at the master’s level?

The first question is beyond the scope of the analysis, although the authors will philosophize on the topic later in this paper. The second question, being of greater interest to graduate school researchers, forms the main topic of this paper. To that end, the following research question was asked:

- Does the undergraduate degree from India (4-year technical vs. 3-year commerce) predict graduate academic performance, as measured by first semester GPA or graduate degree completion?
 H_A: There is a significant difference in academic performance between students with a 4-year and a 3-year bachelor's degree.
 H_O: There is no significant difference in academic performance between students with a 4-year and a 3-year bachelor's degree.

To answer this question, two samples of student information were collected. The first sample included 75 students who were academically dismissed from a Master of Science in IT Management (MSITM) program due to failing the same class twice during a given period. The second sample was a random sample of 75 students who started their program during the same time period and graduated without repeating any classes. This purposive sample was chosen to magnify differences between successful and unsuccessful students for analysis.

Relationship between Bachelor’s Degree Duration and Graduation Rate.

Table 5 shows that about fifteen percent of the students had earned a three-year degree. Figure 1 provides a visual comparison. A slightly larger portion of students who graduated had obtained a three-year degree, rather than a four-year technical degree. However, the chi-square test showed that this difference is not statistically significant ($p = 0.257$). Thus, no significant difference in graduate degree completion was found between 4-year and 3-year bachelor's degrees.

Table 5. Crosstabulation of Graduated vs. Years of Degree

Count	Years of Degree		Total
	3	4	
Academically Dismissed	9 (12%)	66 (88%)	75
Graduated without Failures	14(19%)	61 (81%)	75
Total	23 (15%)	127 (85%)	150

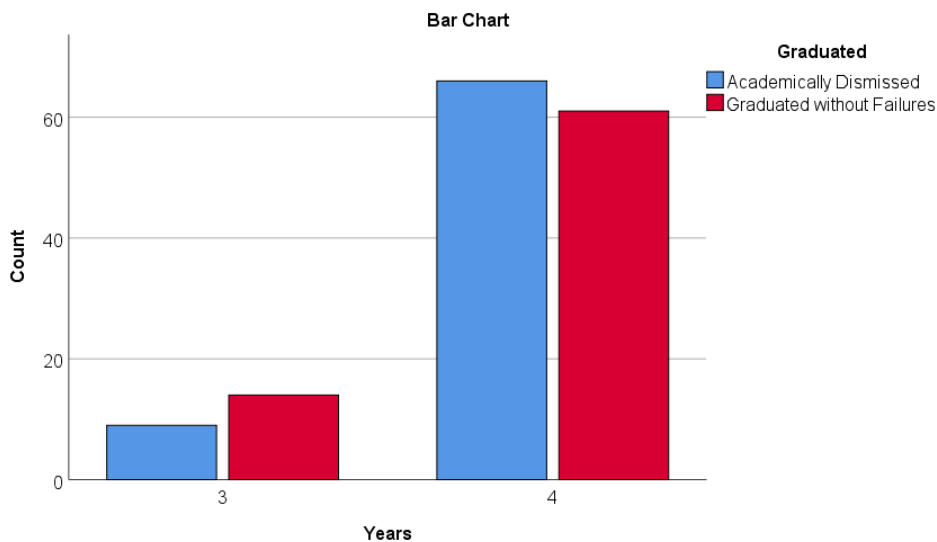


Figure 1. Bar Chart of 3-year vs. 4-year Degrees.

Relationship between Bachelor’s Degree Duration and First Semester GPA.

A t-test was performed to compare the first semester GPA between three-year and four-year bachelor's students. For students who graduated without failure, no significant difference was found ($p = 0.80$). For students who were academically dismissed, a significant difference was found ($p = 0.03$). These differences are highlighted in Figure 2. As can be seen, students with a four-year bachelor's degree who struggled, did so earlier in their studies. However, for students who succeeded, there was no difference in first semester GPA between students with the three-year vs. four-year bachelor's degree. Note that while GPA samples were skewed due to the 4.0 cutoff, the t-test is robust against normality, and is acceptable for use in this case.

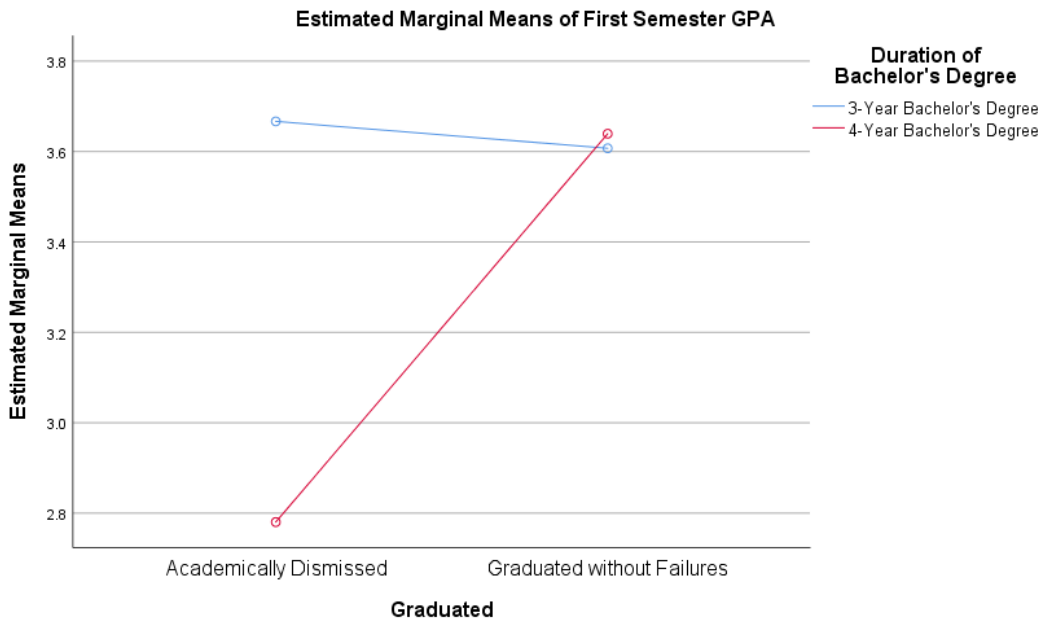


Figure 2. Comparison of First Semester GPA between 3-Year and 4-Year Bachelor’s Degrees.

CONCLUSIONS

In many countries including India, Pakistan, Canada, and Australia, a well-rounded liberal arts education is the goal of the secondary education, and the focus at the bachelor's level is to prepare for a specific field of work. Thus, the Bachelor of Arts or Bachelor of Science degrees in India, for example, can be completed in three years rather than four. The difference between the 4-year United States’ bachelor’s degree and the 3-year bachelor’s degree from other countries is the general education classes. Without the general education electives, the core content is often studied at a deeper level at the bachelor's level, making their core content more solid. These core contents are often equivalent to some of the core material studied at the master's level in the U.S. The exceptions include the technology degrees, which may take four years to complete in a country such as India. These are comparable in scope to five-year engineering degrees in the U.S. Medical and law degrees take longer to complete irrespective of the country.

The results from this study indicate that students with a three-year bachelor's degree and those with a four-year bachelor's degree from country such as India are both prepared to successfully complete a Master of Science in IT Management program. While the Master of Business Administration degree students were not included in this analysis, one could expect the same results because the core business courses in the three and four-year bachelor’s degrees from other countries (for example, India) are consistent with the core business courses in a four-year U.S. business degree. Based on these results, the ability of a student with a three-year business degree to succeed in master’s degree in a technology area could be a test of the competencies acquired in the core business courses rather than the duration of the degree program. The core courses in a three-year Indian degree provide sufficient business and technical background to enable the student to successfully complete a technology-related master’s degree program in the U.S. While the missing general education courses in the Indian Bachelor’s degrees may affect other areas of adult life, they do not affect success in a specialized master's program and should not be considered as a necessary admission requirement into a master’s degree in an appropriately related field.

RECOMMENDATIONS

Master's Degree Readiness

Based on these findings, we recommend that with all other factors being equal, the three-year bachelor's degree from India be accepted as equivalent to a U.S. four-year bachelor's degree for the purposes of acceptance into a master's degree program. We suggest that a similar analysis be performed for other types of degree and country combinations as the need arises, in addition to consideration of the Bologna Accord findings.

Employment Readiness

Logically, employment readiness in the same field of study would depend not on the number of years of study at the bachelor's level, but on the number of core courses completed. Alternately, in some fields the argument could be made that the well-roundedness and maturity of the student play a crucial factor. Employers may be at a disadvantage in performing analyses on their employees' prior education, as they are not likely to be as well versed in foreign credential evaluation as an institution of higher education would be, and would be forced to rely on the findings of a credential evaluation organization. As we have seen above, those organizations are reticent to consider international three-year degrees as equivalent to U.S. four-year degrees. This is an area where more study is needed.

Finally, maturity is often an individual and cultural matter, affected more by the first 18 years of upbringing than by an extra year of college. Much has been written about the sociological trends in the Gen-Y and Gen-Z generations, and U.S. primary and secondary education's responses to these changing needs. Due to rapidly changing trends, both sociological and economic, much of the earlier study of tertiary education's response would be out of date. Further, because of cultural variations worldwide, the optimal solution may vary from country to country, as the members of the Bologna Process have learned. Much more can be learned in this area.

References

- Allen, E. L. (1973). *Time and the baccalaureate: An analysis of the three-year undergraduate degree concept in the American college and University*. University of Illinois.
- Basken, P. (2023, June 27). US lawmakers encouraging three-year degree experiments. *Times Higher Education*.
- Clark, N. (2006). *Education in India*. Bowling Green Station: World Education News and Reviews. Retrieved from WES.org
- COE. (2023). *European Higher Education Area*. Retrieved from Council of Europe: <https://coe.int/en/web/higher-education-and-research/european-higher-education-area>
- CollegeRaptor. (2023, August 22). *A Guide to 3 Year Bachelor Degree Programs*. Retrieved from College Raptor: <https://www.collegeraptor.com/find-colleges/articles/college-search/a-guide-to-3-year-bachelor-degree-programs/>
- ECE. (2023). Retrieved from Educational Credential Evaluators: www.ece.org
- EP. (2023). Retrieved from Educational Perspectives: <https://www.edperspective.org/>
- Higher Education and Workforce Development Subcommittee. (2023, June 14). Hearing recap: Postsecondary innovation edition. *Postsecondary innovation: Preparing today's students for tomorrow's opportunities*. Retrieved from <https://edworkforce.house.gov/news/documentsingle.aspx?DocumentID=409286>
- Inamete, U. B. (2015). The academic discipline of management and the Bologna Process: The impacts on the United States in a globalizing world. *Vision*, 19(1), 49-57. <https://doi.org/10.1177/0972262914567772>
- Liu, J. (2022, June 21). Top Chinese universities trial three-year bachelor's degrees. *Times Higher Education*.
- Lynds, J. (2009, December 11). UMFK debuts 3-year bachelor's degree. *Bangor Daily News*. Retrieved from <https://www.proquest.com/newspapers/umfk-debuts-3-year-bachelors-degreeprogram/>
- Marcy, M. B. (2020). The three-year degree. *Liberal Educator*, 52-56.
- Moody, J. (2023). The First 3-Year Degree Programs Win Approval. Retrieved from <https://www.insidehighered.com/news/business/academic-programs/2023/09/01/first-three-year-degree-programs-win-accreditor-approval>
- NACES. (2023). *NACES*. Retrieved from National Association of Credential Evaluation Services: <https://www.naces.org/>
- Ramos, B. (2020, March 24). Educational Perspectives Credential Evaluation. *Presentation*.
- St. Laurent, H. (2019, January 23). *Credential Evaluation I*. Retrieved from ECE Connection: <https://theconnection.ece.org/Resource/489>
- Syracuse. (2023). *Equivalence of a U.S. Bachelor's Degree*. Retrieved from Syracuse University: <https://www.syracuse.edu/admissions/graduate/international/equivalence-of-us-bachelors-degree/>
- UNC. (2023). *International Applicant FAQs*. Retrieved from Charlotte School of Data Science: <https://dsba.charlotte.edu/faqs/international-applicant-faqs>
- University Grants Commission. (2018). *Guidelines for providing skill based education under National Skill Qualification Framework*. Retrieved September 29, 2023, from University Grants Commission: https://www.ugc.gov.in/pdfnews/6556003_Guidelines-for-providing-Skill-Based-Education-under-NSQF.pdf
- Vanderbilt. (2023). *International Education Requirements*. Retrieved from Vanderbilt University: <https://business.vanderbilt.edu/mba/admissions/international-education-requirements/>
- Viator, K. (2023). Three-year degree programs and factors for success: A study of three-year undergraduate degree in the United States and Europe. Southern New Hampshire University.
- WES. (2014). *WES Policy on Selected Three-Year Bachelor's Degree from India*. WES.
- WES. (2023). Retrieved from World Education Services: <https://www.wes.org/>
- Whitford, E. (2021, November 8). A new push to create a 3-year degree option. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/news/2021/11/09/colleges-explore-new-three-year-bachelor%E2%80%99s-degree-program>