



International  
Education  
Evaluations

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## WHITE PAPER: BENCHMARKING AND YEAR COUNTING DEFINED

# White Paper: Benchmarking and Year-Counting Defined

## Executive Summary

There are two prevailing methodologies the international credential evaluation industry has used in the recognition of foreign credential comparisons: year-counting, which relies on the number of years of full-time study, and benchmarking, which emphasizes learning outcomes achieved. Year-counting has been considered the standard in the United States (US) since the credential evaluation industry was privatized in the late 1970s and was the methodology most often used by higher education institutions, professional licensure boards, and immigration adjudicators. However, with the invention of the internet and the availability of rich data at our fingertips, over the past 10-15 years, many US higher education institutions (HEIs) have realized years alone may not be the best predictor of academic readiness for graduate level studies. Many US employers have also recognized three-year graduates are performing just as well as four-year graduates in many professions. To further advance global learner mobility and our unwavering commitment to lowering the barriers for international students and workers, International Education Evaluations (IEE) has differentiated these two methodologies for increased transparency and to better serve the needs of our institutional partners. IEE's higher education partners now have the ability to choose the evaluation approach that best aligns with their own internal policy. Reports will now specify the methodology used by the evaluator in making postsecondary equivalency determinations.

## Background

Foreign credential evaluation seeks to describe an individual's educational qualifications in detail and provide an overall equivalency of the closest comparable program of study, along with a conversion of the credits and grades, from one country to another. Evaluation reports allow individuals who have completed their education and training in one country to further their education, seek employment, apply for licensure, or petition for certain immigration categories in another. They also permit universities, employers, licensing boards, and government agencies to assess the qualifications of internationally educated individuals and make informed decisions. In most countries, there is a government agency tasked with the responsibility for recognition of foreign qualifications. In the US, this process is decentralized and privatized, and there is no federal regulation of evaluation agencies.<sup>1</sup> As a result, evaluation policies vary, and equivalency determinations may differ. A student may present the same credential to two evaluation agencies and receive a different credit total, grade point average, and degree equivalency. This doesn't necessarily mean one is wrong; it can (and often does) mean that the evaluators in question have used two different—but acceptable—methods to reach two distinct—but reasonable—conclusions. This is similar to the IRS permitting businesses to file taxes according to a cash or accrual basis; or HEIs allowing students to submit either SAT or ACT scores, knowing that both examinations are reasonable indicators of potential academic success even though they assess students differently. It is important, therefore, that all consumers—students, Higher Education Institutions, licensing boards, and employers—have access to information not only



about the organizations providing these reports, but also about the process by which the evaluations are conducted and the factors that are critical to decisions about degree comparability.

**IEE degree comparability decisions involve an analysis of seven factors:**

- **Institutional status**  
 How is the school, college, university, or institution recognized? How are the programs of study evaluated and monitored? What kind of quality control or accreditation exists to ensure students are receiving reasonable instruction?
- **Entrance criteria**  
 What are the admission requirements for a specific program of study? What qualification must a student possess in order to be accepted into a program of study?
- **Program duration**  
 How many years of full-time study must a student complete to graduate with a specific diploma or degree? How is a year of full-time study defined? How many weeks constitute an academic term? How is a unit or credit defined? How many instructional hours are needed for a subject? How many hours are represented by a single credit? How many credits make up a program of study?
- **Field of study**  
 Is the curriculum more theoretical or applied/practical? Is the program academic or professional? Does the program prepare a student for a specific job or is it designed to prepare the student for further academic study? What is the main subject or major? How much of the curriculum is specialized in that major?
- **Program complexity / level of study**  
 What is the typical educational ladder for a specific country or system of education? How rigorous is the curriculum? How are the instructors for the program trained and what are their qualifications? What is the educational framework that exists in a specific country?
- **Professional or vocational access**  
 For what specific profession or vocation does the program prepare the student? Are there licenses or certifications that can be obtained upon completion of this program?
- **Academic achievement**  
 For what specific educational level does the program prepare the student? Is the student able to advance to the next step on that country's educational framework/ladder? What kinds of information or type of knowledge does the graduate possess?

**IEE evaluators use two methodologies:**

- **Year-Counting**  
 This approach to credentials evaluation prioritizes years of full-time study as foundational to the comparison of international qualifications and accepts that an academic year (or term) of full-time study in one country is proportionate to an academic year (or term) of full-time study in another. The factors (listed above) that matter the most are entrance criteria and program duration. While it is an



oversimplification to reduce the entire evaluation strategy to simply counting the number of years that a program requires, this method certainly gives more weight to calendric measurements of learning.

- **Benchmarking**

This contextual approach to evaluation is used widely around the world and is gaining traction in the US. It prioritizes academic and professional access in the comparison of international qualifications and prefers contact hour measurements of learning duration. More importantly, this evaluation strategy accepts that outcomes and achievements in one country are commensurate with outcomes and achievements in another. It gives weight to how specialized and well-prepared students are for further studies or to enter the workforce with advanced skills. The factors (listed above) that matter most are program complexity, professional access, and academic achievement.

Both strategies have significant overlap. Benchmarked evaluations do, in fact, involve some year-counting. “Year-counters” recognize and implement benchmarks—especially when it comes to secondary-level or professional education.<sup>ii</sup> US higher education institutions and US evaluation agencies rarely employ only one methodology in 100% of cases. When it comes to evaluating foreign undergraduate programs, however, it would be entirely fair to say that if analysts employing a year-count approach are unable to confirm four years of full-time study beyond the end of secondary education, they are consequently unwilling to endorse a bachelor’s degree equivalency.<sup>iii</sup>

## Problem Definition

In its infancy, higher education in the United States was attended primarily by those whose family owned businesses or land. Their wealth ensured access to gainful employment, with or without university education. Undergraduate programs, therefore, were not necessarily designed to prepare students to acquire specialized knowledge so much as they were intended to teach students how to think critically and creatively across a wide range of material. Furthermore, they were not created to prepare students for specific vocations, but rather designed to teach a breadth of general curriculum in arts, humanities, social sciences, exact sciences, and mathematics. Highly specialized and professional studies were pushed to advanced or graduate programs.<sup>iv</sup>

While the US is certainly not unique in its fondness for the liberal arts model, most immigrants who seek to further their education or careers in the US have often been educated in a country whose education system is characteristically career-oriented and far more specialized and technical than most American undergraduate programs. Is one education system superior to another? Absolutely not. The goals and tactics are distinctive, yet both systems produce successful graduates. The difficulty lies in the attempt to compare the two using a year-counting approach, which has long been the traditional method used by American credential analysts.

Under this model, foreign educated individuals whose immigration status, university admission, licensure application, or employment offer depends upon a specific US degree equivalency may find that the four-year, liberal arts model upon which that target equivalency is framed is working against them. Let’s take a physics graduate from India, for example. Despite having completed a Bachelor of Science degree in Physics which included more than double the amount of physics curriculum than what is required in a US undergraduate physics major, and regardless of having the same number of instructional hours for the entire program, an Indian student’s degree is judged as “not equivalent.” The opportunities to be accepted to a graduate program in quantum



mechanics, or to be offered a job in thermodynamics research, etc., suddenly disappear, regardless of how well qualified the graduate may be. The program was three years rather than four. The gate is closed.

## Reframing the Issue

At IEE, we take seriously our commitment to all stakeholders—both the internationally-educated clients who seek evaluation services for immigration, admission, employment and licensing processes; as well as the US government agencies, higher education institutions, employers, and licensing boards who receive evaluation reports and depend on our expertise and research. We view both evaluation strategies as effective methodologies that have been developed over decades by those of us engaged in applied comparative education research. What has become increasingly clear to us over the last few years, however, is that our preference for year-counting as a one-size-fits-all approach fails to fully defer to our corporate mission of advancing global learner mobility and advocating for the recognition of international education qualifications which enable individuals to fully utilize their education. We also realized that we were inadvertently underserving those higher education institutions that do accept or even prefer a benchmarking approach.

Faced with the challenge of how we can better serve our partners without diluting the unique rules of comparative education, IEE found it necessary to differentiate between these two prevailing methodologies. To arbitrarily choose one methodology could alienate organizations like USCIS and various state licensing boards whose regulations explicitly require year-counting methods. The answer was not to simply abandon year-counting altogether. Neither was the solution to employ a mixed, ambiguous approach whereby the users were left to guess the methodology used in the evaluation depending on the credential or country in question.

Instead, we embraced the idea of defining the two methodologies and allowing the recipients to determine which best suits their purpose. Rather than pushing a single agenda, our goal is to educate our partners on the shared tenets, the distinctiveness, and the strengths of both evaluation methodologies, and instead of attempting to convince them why one is necessarily better than the other, we are offering a choice. We want to know which factors are most important to the institutions we serve so that we can apply those consistently to their applicants. Our institution partners will have the ability to choose our new standard approach of leaning into postsecondary benchmarking while our immigration and licensure clients will continue to receive evaluations based on a strict year-counting approach.

## Data-Driven Solution

The first step in our journey was research. Certainly, we understood that international students and immigrants were invested in the idea of benchmarking equivalencies. Of course, we recognized that some of our established institutional partners—and a quickly-growing number of prospective institutional partners—were enthusiastic about the possibility that we might be able to move away from our longstanding conviction that “only years matter.” For our executive team, this had to be more than a simple business decision. This had to resonate with our commitment to integrity and excellence, which are detailed in our organization’s core values. To put it in simpler terms: we had to make sure the idea held water—that benchmarking could stand up to critical examination.



One of the principles defining a year-counting position is that the time spent learning should be measured. So, we began by intentionally doubling down on that idea. Does year-counting go far enough? Should we count hours instead? We discovered that in many three-year bachelor's degree programs, the contact hours spent by students in direct instruction and in study or preparation not only matched but far exceeded the hours spent by their North American counterparts enrolled in four-year programs.<sup>v</sup> We already knew that Indian and European students spent a greater percentage of their undergraduate career engaged in their major(s) than a typical US student.

Bachelor's degree: History	Total Credit Count	Minimum Credits in History	Percent of Time Spent in Major
<i>University of Michigan, USA [4 years]</i>	120	30	25%
<i>University of Antwerp, Belgium [3 years]</i>	180	146	81%
<i>Loyola College, India [3 years]</i>	159	125	79%

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Bachelor's degree: Chemistry	Total Credit Count	Minimum Credits in Chemistry	Percent of Time Spent in Major
<i>New York University, USA [4 years]</i>	128	50	39%
<i>University of Helsinki, Finland [3 years]</i>	180	90	50%
<i>Osmania University College for Women, India [3 years]</i>	150	109	73%

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Although our conventional year-counting evaluations would indicate three-year graduates did not possess bachelor equivalent degrees, our evaluation reports would routinely draw attention to the significant number of credits earned in the major of study, especially when those students were applying to US graduate programs. What became increasingly clear is this was not simply a question of percentages; it was a question of raw numbers.

As an illustration, let's look at Parvati who completed a three-year bachelor's degree in physics in India with 140 Indian credits, and Elena who completed a four-year bachelor's degree in physics in the United States with 126 US credits. Both are applying to a US graduate program in optics. A year-counting approach to Parvati's degree holds that she completed between 90 and 100 equivalent US semester credits in total, or approximately 32 credits per year, because that is what Elena's program required of her for three years of study. This approach, referred to as prorating, applies the standard full-time credit workload of US undergraduates (15-16 per semester over the



course of eight semesters) as the target, and uses the Indian credits or marks per subject as weights for the purpose of obtaining a proportionate credit distribution. In other words, a 20-credit semester in India is reduced to 15; a 4-credit course is reduced to 3; a 3-credit course is reduced to 2.25.

Years	Indian Credit Required	US Credits Required (Target)	Conversion Ratio
<b>1</b>	40-47	30-36	1 : 0.75
For every credit earned in India, a year-count approach analysis will show 0.75 credits in the US, effectively reducing the value of the Indian credit by 25%.			

The next natural question involves how Indian universities define a credit. In the US, a credit hour is one hour (in reality, this “hour” is usually 50 minutes) of instruction plus an additional two hours of study (non-classroom student preparation) per week over the course of a fifteen-week semester. Do Indian universities require less of their students per credit hour?

Bachelor of Science (Physics)	Credits Required for Graduation	Instructional Hours per Credit	Total Instructional Hours per Degree
<i>3-year Indian student</i>	140 credits	15	2100
<i>4-year US student</i>	126 credits	15	1890

The answer is unambiguously no.<sup>viii</sup> The Indian Choice-Based Credit System (CBCS) follows the same structure as the US semester credit system. Even in places like Brazil or Europe, we found students were completing in three years what US students complete in four. For example, a standard “year-counting” approach holds that 180 European credits in a three-year bachelor’s degree program are equivalent to 90 US semester credits. When one investigates the actual instructional and learning hours represented in a single European credit, it becomes clear that the 2:1 conversion strategy is year-counting in disguise. It fails to consider the actual time European students spend in classrooms, laboratories, and libraries. It uses European credits as weights for proportionate credit distribution. In fact, graduates of European first cycle degree programs are averaging the same number of study hours in three years as their North American counterparts complete in four.<sup>ix</sup>

Bachelor’s degree	Credits Required for Graduation	Study Hours* per Credit	Total Study Hours per Degree
<i>3-year Spanish student</i>	180 credits	25-30	4500-5400
<i>4-year US student</i>	120 credits	42.50	5100

\*Study hours include both actual contact hours in a classroom or laboratory setting as well as the minimum number of hours students are expected to work independently in order to be successful in the course.

To return to our physicists, Parvati and Elena have equivalent learning outcomes because they have access to the same level of employment, the same level of certification or licensure potential, and/or the same level of further academic education in their respective countries. They have both completed first cycle, undergraduate programs of similar rigor. Beyond that, one can argue that not only did Parvati’s program demand she complete as many contact hours as those completed by Elena—her program actually required more.



We can make the argument Elena’s program had more of a liberal arts focus and that she might be better equipped to communicate effectively, negotiate, pursue creative endeavors, appreciate art, or even think critically about subjects outside of mathematics and physics, but it is much harder to justify that Parvati’s degree is inequivalent because it was completed 25% faster. It is difficult to argue the gate should remain closed to Parvati when it comes to professional competency or her ability to successfully complete a master’s degree program.

In addition to measuring the amount of time spent engaged in active learning, a benchmarking strategy measures learning outcomes. What have students learned and what are they capable of doing upon completion of the program? Can employment be sought with this bachelors degree? Can education be furthered at the graduate-level? Does program completion lead to professional licensure? Each of these questions help inform an equivalency determination from a benchmarking perspective. Licensed social workers educated in Denmark complete twice as many courses in core social work curriculum than their US counterparts.<sup>x</sup> Does reducing their degree to the equivalent of 90-105 US credits accurately reflect their preparedness for US graduate study or their ability to perform the tasks the role of a social worker demands? The answer is simply, “No, it does not.” These are not “apples to apples” comparisons, granted, but data suggests there are far more factors *validating* the notion that a degree equivalency *can* be reached in this scenario than factors to the contrary.

Beyond the number of years, factors that are irrelevant in the IEE benchmarking approach are elements like the relative quality of the foreign institutions as the source of judging the academic standing of individual students. These are not included among the seven factors (discussed previously) we use to make equivalency decisions. Presuming the foreign university meets the recognition standards required for IEE to indicate it is on par with a regionally accredited institution in the US, the programs offered by said university will be eligible for benchmarking consideration. Moreover, it is not industry standard practice for credential evaluation reports to speak to issues of relative institutional prestige or selectivity. A bachelor’s degree from Harvard University and a bachelor’s degree from Bridgewater State University, 45 miles away, are both US bachelor’s degrees. Likewise, a student who graduates from Harvard with a 2.8 GPA and a student who graduates from Bridgewater with a 3.9 GPA both have bachelor’s degrees. One can certainly make judgements and comparisons between the two students and their academic accomplishments, but those factors have no bearing on a credential evaluation degree equivalency. The factors that truly matter in a benchmarking approach are the complexity and rigor of the program in question and what graduates of said program may access—both academically and professionally. To be clear, adopting a benchmarking approach does not simply mean all three-year undergraduate qualifications will receive a US bachelor’s degree equivalency.

## Conclusion

While allowing for the fact that certain US employers, licensing boards, government agencies, and university admission offices are not prepared to abandon the year-counting standard, we must make efforts to move the needle forward. Our philosophical approach rests not on the belief that American higher education is the gold standard for which we should act as gatekeepers, but rather that it is one of several successful global education systems. From IEE’s viewpoint, benchmarking is an opportunity that creates a gateway for international students and immigrants. We see this as a new and optional approach for partners to promote global learner mobility and facilitate diversity and inclusion initiatives in the US workforce and in US colleges and universities. We look forward



to continuing to provide our clients with high quality, research-backed evaluation reports while embracing methodology choice and transparency.

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<sup>i</sup> “Recognition of Foreign Qualifications,” US Department of Education, accessed June 21, 2023, <https://sites.ed.gov/international/recognition-of-foreign-qualifications/>

<sup>ii</sup> For a nice summary of the two methodologies and their adoption across US higher education institutions five to six years ago, see: “Square Pegs, Round Holes, and Understanding Different Credential Evaluation Philosophies,” American Association of Collegiate Registrars and Admission Officers (AACRAO) and Association of International Credential Evaluators (AICE), 2018, <https://www.taicep.org/taiceporgwp/wp-content/uploads/2018/12/RoundPegsSquareHolesandUnderstandingDifferentCredentialEvaluationPhilosophies.pdf>

<sup>iii</sup> “The Three-Year Bologna Bachelor’s Degrees: a US and European Perspective,” American Association of Collegiate Registrars and Admission Officers (AACRAO Connect), July 25, 2017, <https://www.aacrao.org/resources/newsletters-blogs/aacrao-connect/article/the-three-year-bologna-bachelor-s-degrees--a-u-s--and-european-perspective>

<sup>iv</sup> For more information on the liberal arts tradition in American higher education and the scope of modern liberal arts education in the US, see: “The Liberal Arts and the University: Tracing the Origins and Structure of Undergraduate Education in the US and at the University Of California,” Center for Studies in Higher Education, University of California at Berkeley, June 2015, [https://cshe.berkeley.edu/sites/default/files/publications/rops.cshe\\_.7.15.dirks\\_.ugeducation.6.16.2015\\_1.pdf](https://cshe.berkeley.edu/sites/default/files/publications/rops.cshe_.7.15.dirks_.ugeducation.6.16.2015_1.pdf); and “Executive Summary: Defining Liberal Arts Education,” Center of Inquiry, Wabash College, 2004, [http://www.liberalarts.wabash.edu/storage/Defining\\_Liberal\\_Education.pdf](http://www.liberalarts.wabash.edu/storage/Defining_Liberal_Education.pdf)

<sup>v</sup> For detailed information about the US credit system and how those inform degree programs, see: “Structure of the US Education System: Credit Systems,” International Affairs Office, US Department of Education, February 2008, <https://www2.ed.gov/about/offices/list/ous/international/usnei/us/credits.doc>; “Program Requirements for Associate’s and Bachelor’s Degrees: A National Survey,” Complete College America (published by Inside Higher Education), July 2012, [https://www.insidehighered.com/sites/default/files/files/Program%20Requirements%20-%20A%20National%20Survey\(1\).pdf](https://www.insidehighered.com/sites/default/files/files/Program%20Requirements%20-%20A%20National%20Survey(1).pdf)

<sup>vi</sup> Belgian degree program, accessed June 21, 2023: <https://www.uantwerpen.be/en/study/programmes/all-programmes/history-programmes/bachelor/study-programme/>; Indian degree program, accessed June 21, 2023: <https://www.loyolacollege.edu/UG2019Restructuring/History.pdf>; US degree program, accessed June 21, 2023: <https://lsa.umich.edu/lsa/academics/majors-minors/history-major.html>; Finnish degree program, accessed June 21, 2023: <https://www.helsinki.fi/fi/koulutusohjelmat/kemian-kandiohjelma/opiskelu/kemian-kandiohjelma-sisalto>

<sup>vii</sup> US degree program, accessed June 21, 2023: [https://cas.nyu.edu/content/dam/nyu-as/casBulletin/documents/NYU\\_CAS\\_Bulletin%202022-2024.pdf](https://cas.nyu.edu/content/dam/nyu-as/casBulletin/documents/NYU_CAS_Bulletin%202022-2024.pdf) ; Indian degree program, accessed June 21, 2023: [http://www.oucwkt.ac.in/admin/syllabus/Chemistry\\_B\\_Sc\\_Chemistry\\_2022\\_03\\_16\\_06\\_37\\_41.pdf](http://www.oucwkt.ac.in/admin/syllabus/Chemistry_B_Sc_Chemistry_2022_03_16_06_37_41.pdf);

<sup>viii</sup> For detailed information on the current Indian Choice Based Credit System (hours per credit and credits per degree program), see: “Minimum Course Curriculum for Undergraduate Courses under Choice Based Credit System,”





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University Grants Commission of India, accessed June 21, 2023; “National Credit Framework: The Draft Report of the High-Level Inter-Ministerial Committee on National Credit Accumulation & Transfer Framework,” University Grants Commission of India, September 2002; and *Evaluation Reforms in Higher Educational Institutions*, University Grants Commission of India, November 2019

<sup>ix</sup> For further information on the hours to credit definitions in Bologna Reform degree programs, see: “ECTS Users’ Guides,” European Commission’s Directorate-General for Education, Youth, Sport and Culture, 2015 and 2009, <https://op.europa.eu/en/publication-detail/-/publication/da7467e6-8450-11e5-b8b7-01aa75ed71a1>, and [https://www.ehea.info/media.ehea.info/file/ECTS\\_Guide/77/4/ects-guide\\_en\\_595774.pdf](https://www.ehea.info/media.ehea.info/file/ECTS_Guide/77/4/ects-guide_en_595774.pdf)

<sup>x</sup> For curriculum examples, see: <https://www.kp.dk/uddannelser/socialraadgiver/>, <https://www.ucl.dk/uddannelser/socialraadgiver/>,